aatagagact 998 ca

1 1886 99.5 1886 9 AB051833 / 33	of results predicted by changual to the score of the results is of the total score distributions of the total score distributions and the score distributions of the total score distributions of the total score distributions of the score	Total number of hits satisfying chosen parameters: 9416466  Minimum DB seq length: 0  Maximum DB seq length: 2000000000  Post-processing: Listing first 1000 summaries  Database: GenEmbl:*	ect score: 1895 ence: 1895 ence: 1 gttag ing table: OLIGO N Gapop 6	GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.  OM nucleic - nucleic search, using sw model Run on: March 7, 2005, 19:45:33; Search time 8237 Seconds (without alignments) 11147.582 Million cell updates/sec
74 21 1.1 2435 9 75 21 1.1 2525 5 76 22 1.1 2684 9 77 21 1.1 2684 9 78 21 1.1 2684 9 79 21 1.1 47305 2 80 21 1.1 45516 2 81 21 1.1 55516 2 82 21 1.1 76982 9 C 84 21 1.1 108282 8 C 85 21 1.1 12354 2 C 86 21 1.1 12592 9 C 87 21 1.1 12592 9 C 89 21 1.1 13482 9 C 89 21 1.1 13482 9 C 92 21 1.1 153192 9 C 92 21 1.1 153192 9	2 67573 8 2 100559 8 2 100559 8 2 1124236 10 2 1175552 10 2 1175552 10 2 1184088 10 2 1184088 10 2 1184088 10 2 1184088 10 2 1184577 10 2 1184577 10 2 1184577 10 2 1252526 2 2 2252526 2 2 236871 2 2 236871 2 2 236871 2 2 255254 2 2 255254 2 3 255254 3 1 1053 4 1 1053 4	40 23 1.2 19839 10 41 23 1.2 19839 10 42 23 1.2 225503 2 43 23 1.2 231912 2 44 23 1.2 232717 2 44 23 1.2 232716 10 45 23 1.2 234746 10 46 22 1.2 1253 10 47 22 1.2 1253 10 48 22 1.2 1524 10 49 22 1.2 1638 11	24 1.3 204584 10 24 1.3 204684 10 24 1.3 204623 20 24 1.3 215127 10 24 1.3 215127 10 24 1.3 215127 2 24 1.3 215476 2 24 1.3 21947 5 23 1.2 21941 5 23 1.2 21941 5	20 60 3.2 60 6 21 46 2.4 1813 4 22 46 2.4 164392 10 23 46 2.4 166392 10 24 34 1.8 26398 10 25 32 1.7 1880 10 26 27 1.4 29 6 27 26 1.4 1284 1.3 65985 2 28 24 1.3 65985 2 29 24 1.3 156599 2 21 1.3 156599 9
		3745 301 301 566 171 172 8CAS 1755 1755		CQ552626 (Ad MMC CQ552626 PIGACRSN D16200 Su MUSSP32A AC134529 AC115415 GPIACRSN D16203 C BD192313 330 D 2 05 C-BD192313 BC079212 C AC127516 AC127516 AC127908 AC129908 AC129908 AC129908 AC129908 AC129908
AL117419 Homo sapi BC001751 Homo sapi BC067984 Xenopus t BC019311 Homo sapi AB075899 Mus muscu Y15994 Homo sapien AC136789 Rattus no AC101274 Mus muscu CQB70186 Sequence AL731542 Human DNA AP006394 Lotus cor AL928803 Mouse DNA AC101605 Mus muscu AL731566 Human DNA AC10132921 Mus muscu AL731395 Homo sapi AC132921 Mus muscu AL121895 Human DNA AC10161 Rattus no CR752649 Danio rer	AC122760 Mus muscu AC122760 Mus muscu AC140155 Takifugu AL935312 Mouse DNA AC145050 Canis fam AC101691 Mus muscu AC144606 Canis fam AC101728 Mus muscu AC101727 Mus muscu AC121575 Mus muscu AC121575 Aus muscu AC121575 Aus muscu AC121575 Aus muscu AC12177 Rattus no AC096541 Homo sapi AC134937 Rattus no AC095370 Rattus no AC121002 Rattus no AC114108 Rattus no AC13692 Rattus no AC13692 Rattus no AC13692 Rattus no AC106692 Rattus no AC13692 Rattus no AC106692 Rattus no	ALG03745 MOUSE DNA AC012301 Rattus no AC087566 Mus muscu AC094171 Rattus no AL844500 Mus muscu BC061122 Mus muscu D17574 Mus muscul BC011079 Mus muscu BV007555 MASC_STS1	1337 Homo sapi 1337 Homo sapi 122243 Mus muscu 1338 Homo sapi 13542 Mus muscu 1299 Mus muscu 19914 Mus muscu 17248 Xenopus 1	2626 Sequence 2626 Sequence 262 Sus scrofa 263 Mus musculu 34529 Mus muscu 34525 Mus muscu 263 Cavia porce 203 Cavia porce 203 Secreted 79212 Rattus no 79212 Rattus no 79212 Ratsus no 79217 Mus muscu 3840 Homo sapi

C 135 C 1156 C 1156 C 1156 C 1165 C 1
2 1 1 1 161419 2 AC136927 5 2 1 1 1 172280 9 AC136927 6 2 1 1 172280 9 AC136927 6 2 1 1 175495 10 AC136927 6 2 1 1 175495 2 AC120786 2 AC120786 2 1 1 17555 10 AC134544 80 1 1 188994 2 AC120338 1 1 188994 2 AC120338 1 1 188994 2 AC120338 1 1 1 199204 2 AC131298 1 1 1 120234 2 AC131298 1 1 1 120234 2 AC131299 1 1 1 1 203336 1 AC136980 2 AC136980 1 AC136980 2
AC136927 Homo sapi AC13655 Homo sapi AC13657 Homo sapi AC13766 Homo sapi AC122369 Rattus no AC123676 Homo sapi AC12369 Mus muscu AC13678 Homo sapi AC134544 Mus muscu AC13678 Papio anu AC13678 Papio anu AC13678 Papio anu AC13678 Papio anu AC13678 Mus muscu AC136880 Mus muscu AC136880 Mus muscu AC136880 Mus muscu AC136880 Mus muscu AC136880 Mus muscu AC136880 Mus muscu AC13678 Rattus no AC136773 Rattus no AC136773 Rattus no AC136773 Rattus no AC126775 Mus muscu AC13678 Rattus no AC13678 Rattus no AC13679 Rattus no AC136799 Rattus no AC136799 Rattus no AC136799 Rattus no AC136799 Rattus no AC136799 Rattus no AC136799 Rattus no AC1367999 Rattus no AC13679999
C 166 20 11 7362 6 AN022379 C 166 20 11 7362 6 AN022379 C 166 20 11 7362 6 AN023823 C 177 20 AN023823 C 17

AR022379 Sequence
AR067882 Sequence
AR067882 Sequence
AR067882 Sequence
AR067882 Sequence
AR198608 Sequence
AR198608 Sequence
AR198608 Sequence
MR431823 Sequence
MR43172 Human N-typ
AR198607 Sequence
AR2012036 Xanthomon
AR2012036 Xanthomon
AR2012036 Xanthomon
AR2012036 Xanthomon
AR2012036 Xanthomon
AR2012036 Xanthomo
AR2012037 Rettus norv
AR2012036 Youse DNA
AR318406898 Oryctolag
AR2019978 Drosophil
AR2018478 Arabidops
BR00122 Pan trogs
BR00122 Pan trogs
BR00122 Pan trogs
AR2018478 Arabidops
BR00122 Pan trogs
AR201841 Mouse DNA
AR2186184 Homo sapi
AR2186186 Mus muscu
AR2186186 Mus muscu
AR212196 Mus muscu
AR212197 Bos tauru
AR212198 Homo sapi
AR213642 Homo sapi
AR213642 Homo sapi
AR213644 Homo sapi
AR2

0000000000000

```
SCORE
STDEV
                                                                                                                                                                                                                                                                                           SHOZHCOHS
                                                                                                                                                                                                                                                                                                                                                                                                                                            ងមាធ្ន
                                                                                                                                                                     Similarity matrix
Mismatch penalty
Gap penalty
                                                                                                                                                                                                                                                                                                                                                                                                           73 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Number of residues:
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query sequence being compared:US-09-559-013E-23 (1-1895)
Number of sequences searched:
1
Number of scores above cutoff:
1
                                                                                                                                                  Gap size penalty Cutoff score
                                                         Times:
                                                                                          Scores:
                                                                                                                                      Randomization group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Results file us-09-559-013e-23.res made by bshears on Wed 9 Mar 105 16:02:43-PST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FastDB - Fast Pairwise Comparison of Sequences
Release 5.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Results of the initial comparison of US-09-559-013E-23 (1-1895) with: File : /home/bshears/canel*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IntelliGenetics
                                                                                                                                                                                                                                                                     15-
                                             00:00:00.00
                                                                                                                                                                                              Unitary
                                                                               Mean
69
                                                                                                                                                             1.00
                                                                                                                                                                                                                                                                    23-
                                                                                                                SEARCH STATISTICS
                                                                                                                                                                                                                      PARAMETERS
                                                                                                                                                                                                                                                                    3
                                                                                                                                                                        K-tuple
Joining penalty
Window size
                                                                               Median
0
                                                                               Standard Deviation 0.00
                                             Total Elapsed 00:00:00:00.00
                                                                                                                                                                         30
32
```

The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Initial Score = Residue Identity = Sequence Name 1070 1080 1090 1100 1110 1120 1130 1140 ccaçaseceres estados e SOFTWARE: PatentIn Version 3.2 SEQ ID NO 33 Sequence 33, Application US/09559013E GENERAL INFORMATION: CURRENT APPLICATION NUMBER: US/09/559,013E
CURRENT FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/168,353
PRIOR FILING DATE: 1999-12-01
NUMBER OF SEQ ID NOS: 33 APPLICANT: Nakayama, Eiichi
TITLE OF INVENTION: CANCER ASSOCIATED ANTIGENS
FILE REFERENCE: L0461.70086US00 APPLICANT: Ono, Toshiro APPLICANT: Nakayama, E LENGTH: 529 TYPE: DNA ORGANISM: Homo sapiens US-09-559-013E-23 (1-1895)
US-09-559-013E-3 Sequence 33, Application US/09559013E 1. US-09-559-013E-3 Sequence 33, Application 1150 1170 GGCGGCGACACATGTCTACTGTGTCCCTCTGTGAC-----AGCTGCCC--CACACAG-AGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCC GATTCA - GAGTGAAACTTGGGCTCTGAGTCTGTCTGCAGCTGAGACACAGCCTCCCGTCCCTTAGT - C TTCTCATCATATATTTCATTTCATTTCATTTCCTGGGCTGATCGAATGAGCTCCTGGATGTTCTCCATCT 30 50 50 70 80 90 TGCTCTGGCGCTTG-CT-CCTGGCCTCCCAGGGACAAGGAGGATTGTAGGAGCTCTTCCACGTTGTTGCTGA CTCAGAGCCCAAGTTTCACTC--TGAATCTCTATCTT---CTAACC---CTTCCTCTT--TTGCTC-CCCG 1010 170 Description 1220 69 49**%** 79 1020 Optimized Score = 227
Matches = 282
Conservative Substitutions 180 190 1240 TTCT----GCTCCTTGAAGCTGGAGCAGT 200 AND USES THEREFOR Init. Opt. Length Score Score 529 Significance = Mismatches = TTTGGTTTCTCCAGTAG-GAG 210 69 227 Sig. Frame 0.00 213 0 0.00

> 0 < o | o Intelligenetics

```
US-09-559-
                                                                                                                                                                                                                                              US-09-559-
                                                                                                                                                                                                                                                                                                                                                           US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                       US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region Alignment: (listed in Clustered order)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wed_9 Mar 105 16:01:59-PST
                                                                                          US-09-559-
                                                                                                                                                                                                  US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-559-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clustered order of selected sequences:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Solution Parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENALIGN - Multiple Sequence Alignment Program Release 5.4
                                                                                                                                                                                                                                                                                                               consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       consensus
    consensus
                                                                                                                                                        consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AMINO-Res-length = 2
DELetion-weight = 5.00
LEngth-factor = 0
Matching-weight = 1.00
NUCLEIC-Res-length = 4
SPread-factor = 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic Alphabet = Identity
Output line length = 80
Compress = Off
Histogram = Off
Randomization = Off
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13. US-09-559-013E-23
23. US-09-559-013E-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      306 cgatggtgctgtctgctccaacctcccttatgcctccTGGTTTgagtctttctgccagttc
                                                                                                                                                                                                                                       245 acggctgccggaatcccacactcgtccagctggaccaatatgaaaaccacggcttagtgcc
                                                                                                                                                                                                                                                                                                                                                                                              184 ttcttcgcactgctgactccaacctggaaggcagagactacctgccgtctccgtgcaaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 ccgctggcttccttccctcactcctgaaggtgctgctcctgcctctggcacctgccgcagc
                                                سر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 gttagaggcggcttgtgtccacgggacgcgggggggatcttctccggccatgaggaagccag
                                                                                                                                                                                                                                                                                                             ttcttcgcactgctgactccaacctggaaggcagagactacctgccgtctccgtgcaaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccgctggcttccttccctcactcctgaaggtgctgctcctgcctctggcacctgccgcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gttagaggcggcttgtgtccacgggacgcgggatcttctccggccatgaggaagccag
cgatggtgctgtctgctccaacctcccttatgcct--TGGTTTgagtctttctgccagttc
                                                                                                                                                      acggctgccggaatcccacactcgtccagctggaccaatatgaaaaccacggcttagtgcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-1895)
(1-529)
```

977 accaaaaccctggcagcttcCTGCAGCTGccccACACAGaggccttgctggtgctgtgcta	US-09-559-
cgatcagcccaggaaalagatgaaatgaatgaaatatatgatgagaactcctactggagaa	consensus
186	US-09-559-
916 cgatcagcccaggaaatagatgaaatgaatgaaatatatgatgagaactcctactggagaa	US-09-559-
tccccgggtacgagaagtagaGTCTactcctatgataatggagaacatccaggagctcatt	consensus
182 GTCT	US-09-559-
855 tccccgggtacgagaagtagaGTCTactcctatgataatggagaacatccaggagctcatt	US-09-559-
A-A-AGA-TCAGAGAA-TTCTCTGAatototatettctaaccottcctctttgc	consensus
151 AtagaGatTCAGaGtgaAacTTgggCTCTGA	US-09-559-
794 AgAcAGAcTCAGAGoccAAgTTtcaCTCTGAatctctatcttctaacccttcctctttgc	US-09-559-
gagggaaagGAGAAGgacaggggactaaggagggacgggaggctgtgtctcagctgc	consensus
141 ggGttAGAAG	US-09-559-
733 gagggaaagcaGgaAGAAGgacaggggactaagggagggacggggaggctgtgtctcagctgc	US-09-559-
acaagaacacaagcaggaagagggcagaaacaggaagagcaagAAGAGGAAcaggaagag	consensus
133 AAGAGGAA	US-09-559-
672 асаадаасасаадсаддаададддсадааасаддаададсаадААGAACaggaagag	US-09-559-
AG-AGCGAGCAAggagtggagcacaggcaggagccgac	consensus
98 aggAGtAGactctaCttctcgtacccggGGAGCAA	US-09-559-
611 gccAGgAGcaagcgCcagagcacaagcaGGAGCAAggagtggagcacaggcaggagccgac	US-09-559-
TGG-CTGAgaggctcagcaacaacG-A-GAGCTCCTacaaTTCTA-	consensus
57 TGGgCTGA tcGaAtGAGCTCCT ggaTgtTctcCatTatcAt	US-09-559-
550 TGGcCTGAgaggctcagcaacaacgtGgAaGAGCTCCTacaatccTccTtgtCccTgggAg	US-09-559-
cacgatgacctcccccatctcaccccacttcacagtgacagaacgccagaccttccag-CC	consensus
54 tCC	US-09-559-
489 cacgatgacctcccccatctcaccccacttcacagtgacagaacgccagaccttccagcCC	US-09-559-
TCTATTctctcacctaacactctcaaggagatagaagcttcagctgaagtctcacccac	consensus
46 CATCTATT	US-09-559-
428 tcTCTATTctctcacctaacactctcaaggagatagaagcttcagctgaagtctcacccac	US-09-559-
actcactaccgttgCTCCAaccacgtcta-TA-GATTC	consensus
367 actcactaccgttgCTCCAaccacgtctacTAtGccaagagAgtcctgtgTTCccagccag	US-09-559-

```
US-09-559- 1587 GACTTacagtgcgctgagccctggcaaaagtgaggacgttgtgcttcgatggagccaggag
                                                                                                                                                                        US-09-559- 483
                                                                                                                                                                                                                                                                                            US-09-559- 1465 cctaccaagatttgtgacacagactatatccagtacccaaactactgttccttcaaaagcc
                                   consensus
                                                                                                                                             consensus
                                                                                                                                                                                                                                                                                                                                                                                                      US-09-559- 1404 AGatgtccgagtctctGGGTGgctccagactgagttccttagcttccagGATGGGGatttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-559- 1343 aftTgtacggtGGGCTccacatGgActTCTGGtgtgcccggcttgCcacgaaaggCTGTGA
                                                                                                                                                                                                                                                              consensus
                                                                                                                                                                                                                                                                                                                                                                           consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-559- 1282 CAGAGCCtGtcCAtcGGCAACCAGGTAGGGtcCcCagAatcaggCCGCtTTtacGggctGg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-559- 1221 GcagoggcaacaatgcgacacctcccacaagactccctttgtcagccccttgcttGcCTCC
||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-559- 1160 CCTGTGCcctcTgtgacttcTGCTCCTtgaagctggagcaGTGCcaCTcagaggccagcCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-559- 1099 gaggagaTcctTggTttcGggaagtCggtctgTgacagcctTGggCggcgacacatgtCTa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-559- 1038 ttcgatcgtgGagaaTaCcTgcatCataacCCccacagCcaaggcCtggaagtacatgCag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              423 cTcTcaggccaGGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262 cctcttc†tgc†ct†cctátttctg¢ccctct†cctgcttg†átt¢ttgtgtcggctc¢†g
GACTTacagtgcgctgagccctggcaaaagtgaggacgttgtgcttcga<u>t</u>ggagccaggag
                                                                                                                egcagtgtctgatgagaa---G--ATCGga-GGTGtcccgcatgagatgtctgcag--TGA
                                                                                                                                                                                                                               octaccaagatttgtgacacagactatatccagtacccaaactactgttccttcaaaagcc
                                                                                                                                                                                                                                                                                                                                             AGatgtecgagtet---GGGTGgetecagaetgagtteettagetteca-GATGGGGattte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGagcctgt--A---G-A----GTAGGgtccccagA-----CC-C-TT---G----G-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GcagcggcaacaatgcgacacctcccacaagactccctttgtcagccccttgcttGCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            -T-T-----GGGCTccaca-G-A--TCTGGtgtgcccggcttgC------CTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTGCcctcT-----TGCTCCTtgaagctgg----GTGCc-CT--------CCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----T---T---T---G------CT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      accaaaaccctggcagct--CTGCAGCTGcc--ACACAGaggccttgctggtgctgtgcta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ceteceéteceTeétfagteéeetgtééttetteétgetttéettectectetteetétt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99AcaaGgAggattGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recactectrécreer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gtCTGCAGCTG agACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Agetettécaégirgttéctgaée
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gattárád törggagattgatódr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cgttctgtcacrcrca
```

```
Alignment score = -6577.00
                                                                                         US-09-559- 530
                                                                                                                          US-09-559- 1892 aaaa
                                                                                                                                                                                                                    US-09-559- 1831 cacggtgggagctgcgccCTCCTTaaaagatgactttacataaaatgttgatcttcaaaaa
                                                            consensus
                                                                                                                                                                                                                                                                                                                                              US-09-559- 1770 ggtctgttactcggcccctactcacatttccttgggttggagcaacagtcccagagagggc
                                                                                                                                                                                  consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-559- 1709 cccaacctgcccacgttcTCTATtgttttgagaccccattgctttcaggctgccccttctg
                                                                                                                                                                                                                                                                                                             consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-559- 1648 ttcagcaccttgactctaggccagttcggatgAGCTGgcgtctattctgcccacaccccag
                                                                                                                                                                                                                                                                                                                                                                                                                                      consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              consensus
                                                          aaaa
                                                                                                                                                                                                                                                                              ggtotgttactcggcccctactcacatttccttgggttggagcaacagtcccagagagggc
                                                                                                                                                       cacggtgggagctgcgccCTCCTTaaaagatgactttacataaaatgttgatcttcaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                       cccaacctgccca----TCTATtgttttgagaccccattgctttcaggctgccccttctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttcagcaccttgactctaggccagttcggat-AGCTGgcgtctattctgcccacaccccag
```

Scoring matrix:

----

C 300 C 300 C 300 C 300 C 300 C 300 C 300 C 310	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C CC C C C C C C C C C C C C C C C C C	C C C C C C C C C C C C C C C C C C C	
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	N N N N N N N N N N N N N N N N N N N	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	20222222222222222222222222222222222222
1.1 225310 1.1 233762 1.1 234717 1.1 234717 1.1 235326 1.1 235794 1.1 2358794 1.1 236010 1.1 236951 1.1 236951 1.1 237720 1.1 238390	1.1 213683 1.1 213817 1.1 213817 1.1 215101 1.1 215105 1.1 215849 1.1 218644 1.1 219686 1.1 221608 1.1 223952	1.1 203159 1.1 203159 1.1 2034974 1.1 205580 1.1 205580 1.1 207580 1.1 207080 1.1 201414 1.1 211414 1.1 211555 1.1 211786		. 1.1 174952 1.1 175302 1.1 175302 1.1 175396 1.1 175491 1.1 175639 1.1 176372 1.1 176372 1.1 176975 1.1 177982 1.1 177982 1.1 177982 1.1 177982 1.1 178380 1.1 178523 1.1 182071 1.1 183577 1.1 183577 1.1 183577 1.1 183577 1.1 183573 1.1 185855 1.1 186330 1.1 186330 1.1 186330
2 AC1150170 2 AC1150170 2 AC114567 2 AC095194 2 AC105692 2 AC151298 10 AL645947 2 AC151268 2 AC098662 2 AC117035	2 AC113958 2 AC099865 2 AC148847 2 AC108664 2 ALL590654 2 ALL590654 2 AC147079 2 AC115283 2 AC135934 10 AC107742	2 BNS57272 2 BNS57272 10 AC137525 10 AC137525 2 AC138019 2 AC146149 2 AC146149 2 CN626940 2 AC130057 2 AC132172 2 AC132172 2 AC13516 2 AC135172 2 AC135172	5 BXX05041 2 ACQ20849 2 ACQ2289 9 AP004370 2 ACQ13730 2 ACQ113413 2 ACQ15313 9 BS000153 2 ACQ15613 2 ACQ26675 2 ACQ26675 2 ACQ26613 10 ACQ21613 10 ACQ21613 10 ACQ21613 2 ACQ23613 10 ACQ21613 2 ACQ23613 10 ACQ21613 2 ACQ23613 2 ACQ23613 2 ACQ23613 3 ACQ23613 3 ACQ23613 4 ACQ23613 5 ACQ23613 5 ACQ23613 6 ACQ23613 7 ACQ23613	9 AC002460 2 AC111838 2 AC121838 2 AC129683 10 AC132577 2 AC026030 10 AC12483 9 AC08050 9 AC091805 9 AC091805 9 AC091805 9 AC091805 9 AC091805 9 AC13561 10 AC11303 10 AC11303 10 AC13561 10 AC1374 10 AC1374 10 AC1374 10 AC140336 10 AC140336 10 AC140336 10 AC140336 10 AC118637 2 AC118637
AC150170 Gallus ga AC115403 Rattus no AC115403 Rattus no AC11567 Mus muscu AC095194 Rattus no AC151298 Mus muscu AL645947 Mouse DNA AC151268 Mus muscu AC098662 Rattus no AC132559 Rattus no AC117035 Rattus no	AC109280 Mus muscu AC113958 Mus muscu AC099865 Mus muscu AC099867 Otolemur AC108664 Rattus no AL590654 Mus muscu AC147079 Pan trogl AC116283 Rattus no AC13934 Rattus no AC137742 Mus muscu	AC148786 OFOLEMUR BY957272 Danio rer AC137525 Mús muscu BX914220 Danio rer AC138019 Papio anu AC101839 Mus muscu AC146149 Pan trogl CR626940 Danio rer AC150057 Gallus ga AC132172 Rattus no AC019334 Homo sapi AC13516 Rattus no AC095379 Rattus no	BX005041 zebrafish AC020849 Mus muscu AC022849 Mus muscu AC022789 Mus muscu AP004370 Homo sapi AC013730 Homo sapi AC113413 Homo sapi AC115931 Mus muscu BS000153 Pan trogl AC151362 Ictalurus AC025675 Homo sapi AC023613 Mus muscu AC023613 Mus muscu AC121872 Mus muscu AC023555 Homo sapi AC023555 Homo sapi AC0235579 Mus muscu	ACO02460 Human BAC ACI101838 Mus muscu AL355677 Human DNA ACO18948 Homo sapi AC129683 Rattus no AC132577 Mus muscu AC026030 Homo sapi AC124830 Mus muscu AC008050 Homo sapi AC124831 Homo sapi AC13033 Homo sapi AC13033 Mus muscu AC129819 Rattus no AC129819 Rattus no AC129819 Rattus no AC125561 Oryza sat AC1303740 Homo sapi AC011164 Homo sapi AC011165 Homo sapi AC0135574 Human DNA AC140336 Mus muscu AL162574 Homo sapi AC140336 Mus muscu AC118669 Mus muscu
C 374 C 375 C 376 C 377 379 380 380 C 382 C 383	364 365 367 368 369 370 371 373	C C 3551 3552 3553 3554 3554 360 361		C C C C C C C C C C C C C C C C C C C
19 19 19 19 19 19	19 11 19 19	119 119 119 119 119 119	111111111111111111111111111111111111111	3 N N N N N N N N N N N N N N N N N N N
0000000000	000000000	000000000000	444400000000000000000000000000000000000	1.1 240 1.1 241 1.1 241 1.1 242 1.1 243 1.1 243 1.1 243 1.1 254 1.1 254 1.1 253 1.1 253 1.1 253 1.1 253 1.1 253 1.1 253 1.1 254 1.1 253 1.1 25
730				13864 1444 1086 1444 1086 1444 1086 1444 1445 1445 1445 1445 1445 1445 144
<b>697</b>			4	
ABO88027 6 B9318 6 BD180525 5 AF294683 5 AF294684 5 AF295195 5 AY165794 9 AK026807 10 BC029741 6 AX461161	AX576131 GGLAMPG9 CR523041 AR429815 AKC71491 AF458274 SPH2B01 AR429826 AK024786 AR375702	G91812 AY055379 PMHISH2B SUPHISB2 AF294666 AF29466749 AY065749 AY065750 AY339114 AY339114 AY339114 AY339124 AY339124 AY339124 AY339125 CQ737591	ACC13536 AEC13536 AEC135384 AX781290 AY619275 AX916154 BDD51687 CQ448501 AF543707 CQ698066 AF484763 AB065389 AB065389 AR412990 AX969824 BD108543	2 AC148331 2 AC116653 2 AC126644 2 AC126644 2 AC126507 2 AC130628 2 AC130752 2 AC133446 2 AC133446 2 AC199468 3 AC120758 2 AC109468 3 AC107367 6 AC118989 6 AC139108 7 AC139108 8 AC139108 9 AC139108 9 AC139108 10 AC139108 11 AC139108 12 AC139108 12 AC139108 12 AC139108 12 AC139108 12 AC139108
8 AB088027  6 B39318  6 B39318  5 AF294683  5 AF294684  5 AF295195  5 AY165794  9 AK026807  10 BC029741  5 BC049326  6 AX461161	AX576131 GGLAMPG9 CR523041 AR429815 AK071491 AF458274 SPH2B01 AR429826 AK024786 AK024786	G91812 AY055379 PMHISH2B SUPHISB2 AF294666 AF294667 AF2946679 AY065749 AY065750 AY339114 AY3391124 AY3391124 AY339124 AY339125 CQ737591	AC113536 AC113536 AE003584 AX7619275 AY619275 AX916154 BD051687 CQ448501 AF543707 CQ698066 AF484763 AB065389 AB065389 AB065389 AB065389 AB065389 AB065389 AB065389 AB065389	AC148331 AC116653 AC126644 AC128507 AC130628 AC130628 AC133446 AC133446 AC095295 AC095295 AC103307 AC103307 AC103307 AC103307 AC10386 AC103676 AC1097601 AC1097601 AC1097601 AC1097601

C 385 C 386 C 387 C 387 C 387 C 387 C 392 C 392 C 392 C 392 C 392 C 392 C 440 400 C 440 400 C 440 400 C 440 400 C 441 400 C 441 411 C 444 411 411 411 411 411 411 411 411 411	
19 1.0 200 19 1.0 200 19 1.0 201 19 1.0 201 19 1.0 201 19 1.0 202 19 1.0 223 19 1.0 233 19 1.0 246 19 1.0 246 19 1.0 246 19 1.0 257 19 1.0 265 19 1.0 265 19 1.0 265 19 1.0 265 19 1.0 265 19 1.0 265 19 1.0 267 19 1.0 3076 19 1.0 3076 19 1.0 3076 19 1.0 308 19 1.0 308 10 308 10 1.0 308 10 308 10 1.0 308 10 308 10 1.0 308 10 308 10 1.0 308 10 1.0 308 10 1.0 308 10 1.0 469 10 607 10 607 10 9667 10 9667 10	
100 6 AX508752 11 1 ARD3993 27 11 ARD3193 3 3 SPHIS1 3 3 AY061073 6 9 AK000743 6 14 RUBHB2 9 HC013789 6 AX047352 3 AB005067 3 AB005067 3 AB005067 3 AB005067 3 AB005067 3 AB005067 3 AR075344 5 AY228779 5 AY228779 5 AY228779 5 AY228779 5 AY228799 5 AY228799 5 AY228790 5 AY228790 5 AY228790 5 AY228790 5 AY228790 5 AY228790 5 AY228796 6 AX60734987 6 AX6073487 7 AY6073767 7	
AX508752 Sequence AB039933 Mus muscu V01356 Sea urchin AY061073 Drosophil BC064942 Homo sapi AK000743 Homo sapi CQ583170 Sequence AB052096 Homo sapi CQ583170 Sequence BC084637 Xenopus 1 AY11834 Drosophil D00156 Rubella vir X92523 M.muscullus BC084572 Sequence BD276297 EXTRACELL AB035667 Drosophil U14103 Mus muscullus BD157994 Primer fo AX047352 Sequence AX022755 Homo sapi AY228773 Limosa ha AY228773 Limosa ha AY228779 Tringa me AY22879 Pedionomu AY22879 Pedionomu AY22879 Pringa me AY22879 Nycticryp AY22879 Actophilo AY22879 Rubella vir AX047353 Sequence AX22879 Rubella vir AX047354 Sequence AY22879 Rubella vir AX047357 Sequence AX07357 Sequence AX22879 Rubella vir AX047357 Sequence AX22879 Rubella vir AX047357 Sequence AX238766 Bos tauru AX057030 Sitta py AY423576 Bos tauru AX057030 Homo sapi AX07497 Homo sapi AX28767 Bos tauru AR03767 Drosophila AX28776 Bos tauru AR03767 Bos tauru AX04987 Homo sapi AX28767 Bos tauru AX28767 Bos tauru AX345925 Sequence AX28767 Bos tauru AX345925 Sequence AX345925 Sequence AX33570 Lycopersi AX17363 Mus muscu CQ6583571 Sequence S38953 Homo sapi AX28767 Bos tauru AX345925 Sequence CG583571 Sequence	
459 459 460 461 461 461 462 463 463 464 466 467 467 467 467 467 467 467 467	of To Of To
	o.rge
000000000000000000000000000000000000000	
977 977 977 977 977 977 977 977 977 977	
143 14 AF435866 14 RUBCG 16 163470 26 AX009468 27 14 AB047330 2 14 AB047330 2 14 AB047330 2 14 AB047330 3 9 AC109483 4 9 HSXRVIII 5 9 AC079087 5 EX0052450 7 2 AC011553 3 CEW02A2 2 14 AB047329 3 CEW02A2 2 14 AB047329 3 AC145124 1 ARUSSISS 3 AROSTSISS 4 AROSTSISS 5 AROSTSISS 5 AROSTSISS 6 ARASTSISS 6 ARASTS	
५५५ मर	Page 4

0 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	C 590	תו חו חו ח	C 583	C 579	ப்பைய	ហហហ	c 571	<b>சு</b> சு		C 563	c 560	n (n (n	(0 (0	C 553	n un un	548 549	n un u	0 C	542 542	c 539	537 538	c 535	C 532 532	 
19 19 19																									•
1.0 127270 1.0 127391 1.0 128620 1.0 128822 1.0 128910 1.0 129302	00000	0000	0000	0000	0000	000	000	000	000	000	000	000	000	00	000	000	000	000	000	000	000	00	000	0000	
9 AC084740 10 AL935327 10 CNS07YOU 2 AP001260 10 AC125308 2 AC083918	0		0		0		0	•	>						4.			0							
AC004740 Homo sapi AL935327 Mouse DNA AL1935327 Mouse DNA AL713840 Mus muscu AP001260 Homo sapi AC125308 Mus muscu AC083918 Homo sapi	AC069360 Homo sapi AC008620 Homo sapi AC079871 Mus muscu AF165423 Homo sapi AL451106 Human DNA	AC191123 RACTUB DO AC008583 Homo sapi AC108920 Mus muscu AC139876 Ornithorh	AL713884 Mus muscu AC079884 Rattus no AL772350 Mus muscu	AC0081751 Gallus qa	AC131236 Homo sapi AC112162 Mus Muscu AC087203 Homo sapi	AC016592 Homo sapi CR753825 Homo sapi AL365277 Human DNA	BX321901 Mouse DNA BX572623 Human DNA AL033526 Human DNA	AF298854 Homo sapi	Continuation (12 ) Continuation (9 of AJ549502 Homo sapi	Continuation (2 of AC130665 Mus muscu	Continuation (2 of AC123006 Rattus no Continuation (5 of	Continuation (2 of Continuation (2 of	AC092450 Homo sapi Continuation (7 of	AC143174 Macaca mu AF019413 Homo sapi	AC010425 Homo sapi AF318573 Bovine he	AF165177 Homo sapi BX255941 Zebrafish	AL390959 Human DNA AP006585 Synechocy	ALT72399 Mouse DNA	U89337 Homo sapien				,~ ~ ,	Human Human Homo s	
																									-
C 673 C 673 C 676	C 6667 C 668 C 669		c 659 c 660	C 655 657	00 00 00 00 00 00 00 00 00 00 00 00 00	c 649 650		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 641 642 1 642		C 635 637	633		••	C 626		621 622	C 619			c 612			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
19 19 19 19	19991	19 19 19	199	19	19	19 19	19 19	19	19	19 19	19 19	19	19 19	19 19	19	19	19	19	19	19	19	19 19	19	19 19	
1.0 155640 1.0 155662 1.0 155869 1.0 155904 1.0 156033 1.0 156054	00000	0000	0000	0000	0000	000	000	000	000	000	000	000	000	00	000	000	000	000	000	000	0 13333	0 13157	0 13094		i ·
2 AC069263 2 AC024454 2 AC023420 2 AC015953 2 AC137066 9 HSDJ16705	2 AC135458 2 AC016324 2 AC079009 9 AP006245 10 AC111012	2 AF000727 10 AC121955 2 AC027099 2 AC068778	10 AL928608 9 AC092745 9 AC025828	5 BX511003 9 CR376864 2 AC013741	9 AC139453 10 AC124110 2 AC138050 2 AC007718	10 AL929001 10 AL591204 2 AC073835	9 AC090459 2 AL603762 9 AC091639	9 AP005433 9 AC026881	2 AC141527 5 AL953847 6 AL355303	2 CR753845 8 AC087181 5 RY005383	9 AC091193 2 CR788316 2 AC022945	9 AC080046	9 AL354916 9 CNS01DU8 9 AL355300	9 AL662828 10 AC126608	9 AC092111 2 AL928569	2 AC068740 2 AC068740	9 AC008459 2 AC151827	AC142021 9 AC120024	9 AC004848	AC14//62 9 AC114738	2 AC016231 9 AL157389	9 AP002495 2 AC097011	10 AC129310 10 AC129310 9 AL157712	10 AF372979 9 HSDJ34F7 10 AC117195	•
AC069263 Homo sapi AC024454 Homo sapi AC023420 Homo sapi AC015953 Homo sapi AC137066 Pan trogl AL121938 Human DNA	AC135458 Felis c AC016324 Homo sa AC079009 Homo sa AP006245 Homo sa AC111012 Mus mu	AC121955 Mus mu AC127099 Homo sa AC027099 Homo sa AC068778 Homo sa	AL928608 Mouse AC092745 Homo sa AC025828 Homo sa	BX511003 Zebrafi CR376864 Pan tro	AC139453 HOMO SAD: AC124110 Mus musc AC138050 Felis cat	9 5 5	999	9 9 8	att	CR753845 Homo sapi AC087181 Oryza sat RX005383 Zehrafish	on it is	AC079467 Homo sa AC080046 Homo sa		AL662828 Human DÑA AC126608 Mus muscu	AC092111 Homo sa	AC068740 Homo sapi AC068740 Homo sapi	AC008459 Homo sa AC151827 Mus mus	o a c	omo e		, = 0	a succ	AC129310 Mus muscr AL157712 Human DNA	And a	

10   15845   5   5027609   50276   5	1.0 156210 2 AC016303
10 156242   5 EX77600   10 156725   5 EX77600   2 EXT   2 EX	1.0 156210 2 AC016303
\$ 802376999 \$ AC021364 \$ AC021364 \$ AC021369 \$ AC0213690 \$ AC0213691 \$ AC0213691 \$ AC023691 \$ AC02369	2 AC016303
The state of the s	
C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 756 C 756 C 756 C 757 C 756 C 757 C 757 C 757 C 757 C 758 C 777 C 758 C 777 C 758 C 777 C 758 C 777 C 777 C 777 C 778 C	ACO16363 Thomas
C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 755 C 756 C 756 C 756 C 757 C 756 C 757 C 757 C 757 C 757 C 758 C 777 C 758 C 777 C 758 C 777 C 758 C 777 C 777 C 777 C 778 C	_
1.0 1683 1.0 1685 1.0 1685 1.0 1685 1.0 1685 1.0 1686 1.0 1687 1.0 1689 1.0 1696 1.0 1696 1.0 1696 1.0 1702 1.0 1702 1.0 1702 1.0 1702 1.0 1702 1.0 1702 1.0 1702 1.0 1703 1.0 1803 1.0 18133 1.0 18133 1.0 18133 1.0 18133	
10 AC129200 186 5 CNS05TEN 186 5 CNS05TEN 186 5 CNS05TEN 187 9 AC091391 29 AC121591 29 AC121591 29 AC201501 20 AC201501 20 AC201501 20 AC202850 20 AC202850 20 AC12151 20 AC202850 21 AC130414 22 AC1309270 23 AC203851 24 AC147678 25 AC485915 26 AC138051 27 AC203851 28 AC48523 29 AC203667 29 AC203677 20 AC203677 20 AC20367 20 AC203677 21 AC121569 21 AC20367 22 AC20367 23 AC20367 24 AC20367 25 AC20367 26 AC20367 27 AC20367 27 AC20367 28 AC20367 29 AC20367 20 AC20367 20 AC20367 21 AC20367 21 AC20367 22 AC20367 23 AC20367 24 AC20367 25 AC20367 26 AC20367 27 AC20367 27 AC20367 28 AC203782 29 AC2057 20 AC2057 21 AC2057 21 AC2057 22 AC2057 23 AC2057 24 AC2057 25 AC2057 26 AC2057 27 AC2056 27 AC20	
ACCO ACCO ACCO ACCO ACCO ACCO ACCO ACCO	
AC129200 Mus muscu AL163872 Human chr AC091989 Homo sapi AC121551 Mus muscu AC079018 Homo sapi AC121551 Mus muscu AFC079018 Homo sapi AC079018 Homo sapi BX001024 Zebrafish AC097630 Homo sapi BX001024 Zebrafish AC097630 Homo sapi BX511100 Zebrafish BX324114 Mus muscu AC022850 Homo sapi AC09777 Homo sapi AC09777 Homo sapi AC09781 Homo sapi AC19786 Canis Fam CR450726 Danio rer AL1358875 Human DNA AC138051 Felis Cat AC14618 Pan trogl AC14618 Pan trogl AC14618 Pan trogl AC150306 Papio anu AC0968357 Homo sapi AC14618 Pan trogl AC150306 Papio anu AC091647 Homo sapi AC14618 Pan trogl AC14618 Pan trogl AC14618 Pan trogl AC14618 Pan trogl AC130356 Homo sapi AC14618 Pan trogl AC130357 Homo sapi AC14619 Homo sapi AC14619 Homo sapi AC14614 Pan sapi AC14614 Pan sapi AC14614 Pan sapi AC14614 Drosophil AC130776 Rattus no AC130526 Rattus no AC130526 Rattus no AC130526 Rattus no AC130527 Homo sapi AC127943 Rattus no AC130526 Rattus no AC130526 Rattus no AC130527 Homo sapi AC127943 Rattus no AC130527 Homo sapi AC127943 Rattus no AC130528 Homo sapi AC127943 Homo sapi AC106785 Homo sapi AC10754 Homo sapi AC10754 Homo sapi AC10754 Homo sapi AC10754 Homo sapi AC107578 Homo sapi AC118051 Mus muscu AC011678 Homo sapi AC118051 Mus muscu AC01378 Homo sapi AC118051 Mus muscu AC01378 Homo sapi AC118051 Homo sapi AC118	

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		C C C C C C C C C C C C C C C C C C C	0 00 0 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 829 823 C 827 C 827 C 828 829 831
119911199	19 19 19 19 19		19 19 19 19 19 19 19	. 119 119 119 119 119 119	19 19 19 19 19 19 19
.0 194994 .0 195488 .0 195860 .0 195860 .0 195981 .0 196490 .0 196697 .0 196697 .0 197046	.0 191677 .0 193499 .0 193704 .0 193704 .0 194050 .0 194215 .0 194205 .0 194405 .0 194708	189465 189655 190364 190760 190784 190790 191113 1911197 1911197 191212 191355 191495	.0 187665 .0 1187691 .0 1188318 .0 1188318 .0 1188383 .0 1188482 .0 1188522 .0 1188522 .0 1188522 .0 1188522 .0 1188787 .0 1188932 .0 118938 .0 118938	1.0 184636 10 1.0 184953 10 1.0 185437 9 1.0 185437 9 1.0 185479 2 1.0 185580 2 1.0 186057 10 1.0 186244 2 1.0 186244 2 1.0 186244 2 1.0 186244 2 1.0 186244 2 1.0 186249 2	0 182033 0 182178 0 182416 0 182740 0 182739 0 183099 0 183057 0 184023 0 184023 0 184395 0 184395
ACC2060 AC130379 0 AC14396 AC149502 AC023948 0 AC150894 AL390062 AC09123 AC009123 AC129841	CNSOBC94  EX957327  EX957327  O AC132619  AC138774  AC024422  AC021122  AC021122  AC021122  AC016480  CNSOIDRV	AC018867 AC148670 AC124633 AC109734 O AL645797 O AC102582 AC147247 APD01779 AC129856 AC110254 AC102564 AC1025636	0 AL179301 BX324153 BX324153 CR382343 AC053489 AC144467 AC125348 AC09021150 AC011150 AC011150 AC01125348 AC022442 AC148664 AC1146642 AC148664	ACC149218 0 ACC193561 0 ACC1945 ACC12945 ACC12975 APD01484 ACC13942 APD023732 APD023732 APD023732 APD0247 ACC139942 ACC139942 ACC146327 ACC026021 ACC146327 ACC146327 ACC146327 ACC146327 ACC146327 ACC146327 ACC146327 ACC146327 ACC166487 ACC1463267 ACC106487 ACC106487	BX323544 AC074198 AC073044 AC113418 AC022619 AC022619 AC02563 AC01827 O AC125543 AC118475
ACIO20609 Homo sapi ACI30379 Homo sapi ACI30379 Homo sapi ACI49502 Xenopus t ACI49502 Xenopus t ACI26038 Homo sapi ACI26038 Mus muscu ACI50894 Mus muscu ACI50894 Homo sapi ACI29841 Rattus no	ACL10578 BOS CAULI ACL20578 Mus muscu AL732381 Oryza sat BX957327 Danio rer ACL32619 Mus muscu ACL32619 Mus muscu ACL38774 Homo sapi ACO24422 Homo sapi ACO21122 Homo sapi ACO21122 Homo sapi ACO2116480 Mus muscu AL118558 Human chr	ACC148670 Macaca mu ACO148670 Macaca mu ACO148670 Macaca mu ACO146633 Mus muscu ACO109734 Rattus no AL645797 Mouse DNA ACO102582 Mus muscu ACO147247 Mus muscu APO01779 Homo sapi ACO129856 Rattus no ACO110254 Mus muscu ACO110254 Mus muscu	AL1772301 Mouse DNA AL139082 Human DNA BX334153 Danio rer CR382343 Danio rer AC053489 Homo sapi AC144467 Papio anu AC102406 Mus muscu AC102515 Homo sapi AC011150 Homo sapi AC011150 Homo sapi AC02142 Homo sapi AC02242 Homo sapi AC0127235 Mus muscu AC127235 Mus muscu AC118664 Macaca mu	AC110218 Mis muscu AC10218 Mis muscu AC1073561 Mis muscu AC119445 Rattus no AC012075 Homo sapi AP001484 Homo sapi AP001484 Homo sapi AC123732 Mis muscu AP002406 Homo sapi AC139942 Mis muscu AP002406 Homo sapi AC139941 Homo sapi AC149347 Homo sapi AC146327 Gallus ga AC0286021 Homo sapi AC149244 Otolemur AC006487 Homo sapi AC102876 Mis muscu AC078958 Homo sapi	BX323544 Zebrafish AC074198 Homo sapi AC023044 Homo sapi AC113418 Homo sapi AC022619 Homo sapi AC022619 Homo sapi AC034144 Homo sapi AC0349143 Zea mays AC018947 Homo sapi AC125543 Mus muscu AP01180475 Mus muscu
				•	•
	0 950 0 950 0 955 0 955 0 956 0 956	0 0 0 0 938 0 940 9421 9444 9446 946	0 0 923 0 0 925 0 925 0 926 930 931 931 935	0 908 0 908 0 909 0 911 0 912 0 913 914 0 915 0 916 0 918 919 921	0 0 0 0 0 8996 0 990998996
19 19 19 19 19 19 19 19 19 19 19 19 19 1	19 19 19 19 19		19 119 119 119 119 119 119	100010000000000000000000000000000000000	1991199
0000000000				1.0 19956 1.0 19966 1.0 19966 1.0 20015 1.0 200490 1.0 200626 1.0 200636 1.0 201371 1.0 201371 1.0 201673 1.0 201833 1.0 202533	0000000000
2 AC12169 2 AC007979 2 AC121683 2 AC123414 2 AC132705 5 CR391943 2 AC148552 10 AC148552 10 AC148552 2 CR356230 2 CR356230 2 AC119365 9 AC009712	2 AC016618 2 AC02610 5 BX005407 10 AL671117 2 AC12179 10 AC127480 2 AC102807 10 AC127078 2 AC127003 2 AC12778 9 AP001858 9 AC011594	2 AL135484 2 AC115273 10 AL929142 2 AC12545 10 AC131690 2 AC123429 2 AC131429 2 AC131131 10 AC13187 2 AC13187 2 AC13189 3 AC090955	10 AC124991 2 AC122351 2 AC122351 2 AC115246 10 AC073590 2 CR759958 10 AC123063 2 CR759964 2 AC123063 9 AC012504 2 AC123710 2 AC132710 2 AC132710 2 AC148550 9 AF1002898 9 AF002898 9 AF002898	10 AC13030 9 AF235096 9 AF235096 2 AC068974 10 AC132388 8 AC109929 10 AC140398 2 AC011965 2 AC128849 2 AC128849 2 AC128849 2 AC128849 2 AC128849 2 AC103935 10 AC99747 2 AC103935 10 AC927561 10 AC934159	10 AL663056 10 AC117224 10 AC134462 2 AC134688 2 AC148323 2 AC124730 2 AC124730 2 BX957253 10 AC137435 2 AC117956 3 AC117956
AC019799 Must AC021683 Rattu AC023414 Homo AC123705 Rattu CR391943 Zebza AC148552 Calli AC118630 Mus CR356230 Danio AC119365 Rattu AC009712 Homo	ACU2 ACU2 BX00 AL6 AC12 AC10 AC10 AC10 AP00 AP00 AP00	ALS: ALS: AC1: AC1: AC1: AC1: AC1: AC1: AC1: AC1	AC12 AC02 AC02 AC12 AC11 AC11 AC12 AC02 AC01 AC01 AC13 AC14 AC14 AC14 AC14 AC14 AC14	AC131 AC131 AF235 AF235 AF235 AC031 AC13 AC134 AC0111 AC0128 AC099 AC099 AC0334	AL6 AC1 AC13 AC14 AC14 AC12 BX95 AC11 AC11 AC11
AC111374 RACTUS IN AC023414 Homo sapi AC023414 Homo sapi AC132705 Ractus no CR391943 Zebrafish AC148552 Callithri AC118630 Mus muscu CR356230 Danio rer AC119365 Rattus no AC009712 Homo sapi	ACU16618 Homo sapi ACU26100 Homo sapi ACU26101 Plomo sapi BX005407 Zebrafish AL671117 Mouse DNA AC121779 Mus muscu AC147480 Mus muscu AC102807 Mus muscu AC127778 Rattus no AP001858 Homo sapi AC111594 Rattus no	15248 Homo sapi	AC124991 Mus muscu AC020250 Homo sapi aC122351 Mus muscu AC115246 Rattus no AC115246 Rattus no AC115246 Danio rer AC123063 Mus muscu AC123063 Mus muscu AC024154 Homo sapi AC012504 Homo sapi AC132710 Rattus no AC146550 Callithri AL159978 Human DNA AP002898 Homo sapi AC101894 Mus muscu AC144673 Mus muscu AC144673 Mus muscu AC144673 Mus muscu AC144673 Mus muscu	13030 Mus musc 13096 Homo sapi 13596 Homo sapi 18974 Homo sapi 18974 Homo sapi 132388 Mus musc 19929 Oryza sat 140398 Mus musc 11965 Homo sapi 11965 Homo sapi 11965 Homo sapi 11967 Mus muscu 127561 Mus muscu 127561 Mus muscu	730

<pre>c (bases 1 to 1886) Ono, T. and Nakayama, E. Direct Submission Submitted (27-NOV-2000) Toshiro Ono, Okayama University Medical Submitted (27-NOV-2000) Toshiro Ono, Okayama University Medical Okayama 700-8558, Japan (E-mail:onotemed.okayama-cho, Okayama, Tel:81-86-235-7192, Fax:81-86-235-7193) 1. 186</pre>	Homo sapiens (human)  M Homo sapiens  ENCATYCIA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  ENCATYCIA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  1 (sites)  1 (sites)  1 (sites)  1 (sites)  1 (sites)  1 (sites)  2 (sites)  3 (sites)  3 (sites)  4 (sites)  5 (ono, T., Kurashige, T., Harada, N., Noguchi, Y., Saika, T., Niikawa, N., Aoe, M., Nakamura, S., Higashi, T., Hiraki, A., Wada, H., Kumon, H., Old, L.J. and Nakayama, E.  1 (dentification off proacrosin binding protein sp32 precursor as a proc. Natl. Acad. Sci. U.S.A. 98 (6), 3282-3287 (2001)  21145836  21145836		1.0 219331 2 AC134216 1.0 220000 2 AC108707 1.0 221235 2 AC108508 1.0 22135 2 AC105588 1.0 221759 2 BES11006 1.0 221903 10 AC115223 1.0 221903 10 AC125223 1.0 222965 2 AC122643 1.0 222978 2 AC122643 1.0 223978 2 AC1228631 1.0 223407 2 AC023387 1.0 223589 2 AC128861	19 1.0 213848 2 AC139346 19 1.0 214121 2 AC141575 19 1.0 214712 10 AC126932 19 1.0 214967 2 AC109979 19 1.0 215196 7 2 AC109979 19 1.0 215123 10 BX000351 19 1.0 215123 10 BX000351 19 1.0 215123 10 BX000351 19 1.0 215210 2 CR749744 19 1.0 215348 2 AC113034 19 1.0 215348 2 AC133034 19 1.0 216522 2 AC138664 19 1.0 217092 10 AL590968 19 1.0 217092 10 AL590968 19 1.0 218085 2 AC099190 19 1.0 218085 2 AC099190 19 1.0 218244 2 BX571726 19 1.0 218340 10 AC124772 19 1.0 218355 2 AC135734 19 1.0 218085 2 AC133734 19 1.0 218085 2 AC132472 19 1.0 218085 2 AC132472 19 1.0 218085 2 AC132472 19 1.0 218085 2 AC135734
Oy  481 TCACCCACCACGATGACCTCCACCATCTCACCCTGACGTGAAGCTTCAGCTGAAGTC 480	241 ACCACAGTTCTCTCTCTCTCTCTCACCTTCACTATACTCAGAGGATTCTGAAAACCACGTCTCAACGAGGTTCAAGAAACCACGGCTGAAAACCACGGCTGAAAACCACGGCTTA 300  29	121 GCCCAGGATTCGACTCAGGCCCCACTCCAGGCAGCCAGCC	Query Match  Best Local Similarity 99.5%; Score 1886; DB 9; Length 1886;  Matches 1886; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  Qy 1 GTTAGAGGCGGCTTGTGTCCACGGGAGGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA 60  Db 1 GTTAGAGGCGGCTTGTGTCCCACGGGAGGCGGATCTTCTCCCGGCCATGAGGAAGCCA 60  Qy 61 GCGCTGGCTTCCTTCCTCACTCCTGAAGGTGCTGCTCCTGCACCCTGGCACCTGCGCA 120  Db 61 GCGCTGGCTTCCTTCCTTCACTCCTGAAGGTGCTGCTCCTGCACCCTGCACCCTGCA 120  GCGCTGGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGCACCCTGCAAGCCA 120	/country="Japan:Okayama"  1. 1886 / gene="sp32" 49. 1680 / gene="sp32" / prodect="proacrosin binding protein sp32 precursor" /protein id="sp393" /protein id="sp39388.1" /prot

FEATURES source

JOURNAL MEDLINE PUBMED REFERENCE AUTHORS TITLE JOURNAL

REFERENCE AUTHORS

TITLE

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

RESULT 1
AB051833
LOCUS
DEFINITION

_	1801 TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA 1860	
FEATURES	1741 ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1800	
-	1681 GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG 1740	
	1621 GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCCACCTTGACTCTAGGCCAGTTCGGATGA 1680	
	1561 TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG 1620 	
COMPAN	1501 CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG 1560 	
REMARI	1441 CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC 1500	
TITLE JOURNI	1381 CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC 1440 	
JOURNI	1321 TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGTGCC 1380	
TITLE	1261 GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA 1320	
	1201 TGCCACTCAGAGGCCAGCCTGCAGGGGCAACAATGCGACACCTCCCACAAGACTCCCTTT 1260	
	1141 GGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG 1200	
	1081 GCCTGGAAGTACATGGAGGAGGAGGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT 1140 	
REFERENC AUTHOI	1021 TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG 1080	
SOURCE	961 AACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCC 1020 	
ACCESSIO VERSION	901 ATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATATATGATGAG 960 	
RESULT : BC03301 LOCUS	841 CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC 900 	
טם סם	781 GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC 840	•
ם סט	721 GAACAGGAAGAGGAGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCT 780 	• •

Ş

음 성 음 성 음 성

8 8 8 8 8 8

밁

음 성

유정

밁

S

음 성 음

Ś

S

장 음 정 음 정

```
ES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    무
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MSIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MED
NCE
ORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NOI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1899)

2 (bases 1 to 1899)

3 (bases 1 to 1899)

3 (bases 1 to 1899)

5 Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsleh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Stapleton, M., Soares, M.B., Bonaldo, M.F., Casawant, T.L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Gazcia, A.M., Gay, L.J., Hulyk, S.W.,

Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.

Generation and mouse CDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BC033010.
BC033010.
MGC.
                                                                                                                        Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 33 Row: e Column: 5 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 17999523.
                                                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs-remail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
CDNA Library Preparation: Michael J. Brownstein (NHGRI) &
Toshiyuki and Piero Carninci (RIKEN)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
                                                                                                                                                                                                                                                                                                           contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIH-MGC Project URL: http://mgc.nci.nih.gov
On Sep 16, 2003 this sequence version replace
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (21-UUN-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 (bases 1 to 1899)
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1899
HOmo sapiens acrosin binding
IMAGE:4822765), complete cds.
BC033010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGACTTTACATAAAATGTTGATCTTC 1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACTTTACATAAAATGTTGATCTTC 1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                    1. .1899
/organism="Homo sapiens"
/mol_type="mRNA"
                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:34783873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             version replaced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NA linear PRI 30-JUN-2004
mRNA (cDNA clone MGC:26629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gi:21542511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NHGRI) & Shiraki
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 1890;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sgo
                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                       424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                       CAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCC
                                                                                                                                                                                                 CCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCA
                                                                                                                                                                                                                                                                                                                                                   CCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      rrcacrcacraccarrecracca accacercracrarecta adada de describir de case
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chcecciccechariccichericerces cherices de conservation de cons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCCCGTGCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product="proacrosin binding protein sp32, precursor"
/protein_id="AAH33010.1"
/db_xref="G1:21542512"
/db_xref="HocusID:84519"
/db_xref="MIK!66852"
/db_xref="MIK!66852"
/db_xref="MIK!66852"
/db_xref="MIK!66852"
/trānslation="MRKPAAGPIPSLLKVILLPLAPAAAODSTQASTPGSPLSPTEYE
RFFALLIPTWKAETTCRLRATHGCRNPTLVQLDOYENHGLVPDGAVCSNLPYASWFES
FCQFTHYRCSNHYYYAKRVLCSQPVSILSPNTLKEIEASAEVSFTMTS91SPHFTVT
QEQQEDGATERSNNVEELLQSSLSIGGQEQAFEHKQBEQVEHRQEPTQEHKQBEGQK
STPMIMENIQELIRSAGEIDEMMEIYDENSYWRNQNPGSLLQLPHTEALLVICYSIVE
RTCIITPTAKAWKYMEEEILGFGKSVCDSLGRPHMSTCALCDFCSLKLEQCHSEASIQ
STPMIMENIQELIRSAGEIDEMMEIYDENSYWRNQNPGSLLQLPHTEALLVICYSIVE
RQQCDTSHKTPFVSPLLASQSLSIGNQYGSPBSGRFYCLDLYGGFHADFWCARLATKG
CEQNRYSGMLQTEFLSFQDGJDFPTKICDTDYIQYFNYCSFKSQQCLMRNRNRKVSRWR
CLQNETYSALSPGKSEDVVLRWSQEFSTLTLGGFG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="ACRBP"
/note="synonyms: SP32, OY-TES-1"
/db_xref="LocusID:84519"
/db_xref="MIM:608352"
46._.1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:9606"
/clone="MGC:26629 IMAGE:4822765"
/tissue_type="Testis."
/clone_lib="NIH_MGC_97"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="ACRBP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1790;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                           밁
                                                                                                                                                                         뫄
                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                   1621
                                                                                                      1624
                                                                                                                                                                             1561
                                                                                                                                                                                                                                                     1564
                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                   1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
ĠŦŦĠŦĠĊŦŦĊĠĸĬŦĠĠĸĠĊĊĸĠĠĸĠŦŦĊĸĠĊĸĊĊŦŦĠĸĊŦĊŦĸĠĠĊĊĸĠŦŦĊĠĠĸŦĠĸĠĊŦ
                                           GTTGTGCTTCGATGGAGCCAGGAGTTCAGGACCTTGACTCTAGGCCAGTTCGGATGAGCT 1683
                                                                                                                                                                                         CGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGAC
                                                                                                                                                                                                                                                                                    AACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                      A G CTT C CAGGAT G G G G ATTT C C CTA C CAAGATTT G T G A C A C A G A C T A T A T C C A G T A C C C A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCGCTTTTACGGGCTGGÁTTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCCCTTGCCTTGCCTCCCAGAGCCTGTCCATCCGCCAACCAGGTAGGGTCCCCCAGAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cacteádadectadectedadedaacaatadaatecaacaceacaadactecettegec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACTCAGAGGCCAGCCTGCAGCGGGAACACATGCGACACACCTCCCCACAAGACTCCCTTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cesceacacererciae cresiseres en constructores de la constructor de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGC 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGAAGTACATGGAGGAGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                credrecterectarricearceregadaaracerecarearaacececacaececaasece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCGCACAGCCAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAGCTGCCCCACACAGAGGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  réererritéerecédes raceas as as as refreres refr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTTCTAACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĠĀĠĊĊĠĀĊĀĊĀĠĀĀĊĀĊĀĠĊĀĠĠĀĀĠĀĠĠĠĠĊĀĠĀĀĀĊĀĠĠĀĀĠĀĠĊĀĀĠĀĠĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĊAĠĠĀĀĠĀĠĠĠĀĀĀĠĊĀĠĠĀĀĠĀĀĠĀĀĠĠĠĠĀĊŦĀĀĠĠĀĠĠĀĊĠĠāĀĠġĊŦġŦġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ĊŦĠĠĠĀĠĠĊĊĀĠĠĀĠĊĀĀĠĊĠĊĊĀĠĀĠĊĀĠĊĀĠĠĀĠĊĀĀĠĠĀĠŦĠĠĀĠĊĀĊĀĠĠĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCC
                                                                                                                                              r Criscaga a reada de crita da directo de decidade de constada de 
                                                                                                                                              1620
                                                                                                                                                                                                                     1623
                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                                   1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1503
                                                                                                                                                                                                                                                                                                                                                                                                                                          1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         663
```

В δ 뮍 8 В S 밁 Ś В Ś 밁 Ś 밁 Ş 밁 δ 밁

Query Match 91.9%; Score 1742; DB 6; Length 1912; Best Local Similarity 99.8%; Pred. No. 0; Matches 1892; Conservative 0; Mismatches 3; Indels 0; Gaps Qy 1 GTTAGAGGCGCTTGTGTCCACGGGACGCGGATCTTCTCCCGGCCATGAGGAAGCCA	C12N15/09,A61K38/00,A61K45/00,A61P37/00,A61P43/00,C07K16/40, PC C12N1/15, PC C12N1/19,C12N1/21,C12N5/10,C12N9/48,C12P21/08,C12Q1/68,C12N15, PC 00,C12N5/00, PC A61K37/02 CC Incyte Clone No: 1393301 Location/Qualifiers FT source /organism='Homo sapiens (human)'. FEATURES Location/Qualifiers 1. 1912 /organism="Homo sapiens" /organism="Homo sapiens" /organism="Homo sapiens" /organism="Homo sapiens" /db_xref="taxon:9606"	TITLE Proteases and associated proteins JOURNAL PATENTICALS INC COMMENT OS Homo sapiens (human) PD 20.02522081-A/10 PD 23UUL-2002 PF 06-AUG-1999 US 60/996114,11-FEB-1999 US 60/119769 PI OLGA BANDMAN, JENNIFER L HILLMAN, MARLH R BAUGHN, YALDA AZIMZAI, PI KARL J GUEGLER, NEIL C CORLEY, HENRY YUE, TOM Y TANG, ROOPA REDDY, PI CHANDRA PATTERSON, JANICE AU YOUNG, LEO L SHIH, DYUNG AINA M LU PC	N N N N	Db 1741 CCATTGCTTTCAGGCTGCCCTTCTGGGTCCTTACTCAGATTCCTTG Db 1741 CCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTG  Qy 1804 GGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGATGA	1684
Oy  1021 TIGCTGGTGCTATTCGATCGTGGAGAATACCTCCACAGCCAAG 1080	Db 797 GTGTCTCAGCTGCAGACTCAGAGCCCAAGTTCACTCCTATGATAATGAGAAC  Qy 841 CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC  Db 857 CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGAGAAC  Oy 901 ATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATATATGATGATGAGAG  Oy 901 ATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATATATAT	Db 617 Qy 661 Db 677 Qy 721 Db 737 Qy 781	Qy 421 Qy 481 Qy 481 Qy 541 Qy 557 Qy 601	241 ACCCACGGCTGCCGGAATCCCACACTGGCAGACGCAGAGACTACCTGCCGTGCA 241 ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA	Db 137 GCCCAGGATTCGACTCAGGCCTCCACCTCCAGGCAGACTACCTAC

BD192303  BD192303  BD192303  BD192303  BD192303.1 GI:33002042  DS J 2007513294-A/6.  WISM unidentified unclassified.  I (Dases 1 to 1899)  RS Spaulding, V., Agostino, M.J., Howes, S.H. and Fechtel, K. Secreted proteins and polynucleotides encoding them.  PAL DATE OF THE OLYMPITUTE INC PRO 19-002513294-A/6  PA 19-2002513294-A/6  PA 19-2002513294-A/6  PB 08-MAY-2002  PR 19-JUN-199 UP 199504681  PR 19-JUN-199 UP 199504681  FR 19-JUN-199 UP 19950468	1217 TGCCACTCAGAGGCCAGCCTGCAGACAATGCGAACACCTCCCACAAGACTCCCTTT 1276 1261 GTCAGCCCCTTGCTTGCCTTCCCAGACCCCTGCCACAAGACCACCTCCCACAAGACTCCCTTT 1276 1277 GTCAGGCCCCTTTTACGGGCTGCCACAAGCCCTGCCACAAGACCAGGTAGGGTCCCCAGAA 1320 1277 GTCAGGCCCCTTTTACGGGCTGCCACAAGACCTGCCCACAAGACCAGGTAGGGTCCCCAGAA 1320 1281 CGGCTTGCCACGAAAGGCTGGAATTTGTACGGGTGGGCTCCACAATGGACTTCCAGGTAGGT
491 CARTCACCTCCCCATTCTACCCCACTTCACAGGAACGCCAGAACCTTCCAGGCCT 485 CGATGACCTCCCCATTCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGGCCT 485 CGATGACCTCCCCCACTTCACCCCACTTCACAGTGACAGACCGCCAGACCTTCCAGGCCT 544  Qy 551 GGCCTGAGAGGCTCAGCACAACGTGAAAGACTCCTACAATCCTCCTTCCAGGCCCT 544  Qy 611 GCCAGGAGCAACACACACACGTGAAAGACTCCTACAATCCTCCTTGTCCCTGGAG 610  Qy 611 GCCAGGAGCAAGCGCCAGAGCACAAAGAGCTCCTACAATCCTCCTTGTCCCTGGAG 610  Qy 611 GCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCACAAGCAGGACACAGGCAGGAGCCGA 650  GCCAGGAGCAAGCACGAAGCAGGAAGAAGAGGCAAGAAGA	FEATURE SO SO SO SOLUTION SOLU

RESULT 4
BD192303
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

Ş 밁 Ś 밁 Ś В Ş В Ś 문 Ş 밁 δ 망 5 밁 S В Ş В Ś ₽

REFERENCE AUTHORS

COMMENT

TITLE JOURNAL

```
REFERENCE
AUTHORS
                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                           RESULT 5
BD136402
LOCUS
                                                                                                                                                                                                                                                                                                              유성
                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                       д
                                                                                                                                                                                                                                                                                                                                                                          ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                    TITLE
JOURNAL
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Ho
E 1 (bases 1 to 1892)
S Ruben, S.M., Ni,J., Rosen, C.A., Yu,G.L., Young, P.E., Fen
Soppet, D.R., Wei,Y.F., Endress, G.A., Duan, R.D., Kyaw, H.
Laflaur, D.W., Olsen, H.S., Shi,Y. and Moore, P.A.
95 human secretory proteins
Patent: JP 2002506627-A 89 05-MAR-2002;
HUMAN GENOME SCIENCES INC
OS Homo sapiens (human)
PN JP 2002506627-A/89
PD 05-MAR-1998 US 60/078573,19-MAR-1998 US 60/078574
19-MAR-1998 US 60/078579,19-MAR-1998 US 60/078578
                                                                                                                                                                                                                                                                               1565
                                                                                                                                                                                                                                                                                                                                        1511
                                                                                                                                                                                                                                                                                                                                                            1445
                                                                                                                                                                                                                                                                                                                                                                                                                                            1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 905
                                                                                                                                                                                   BD136402
95 human secretory protei
BD136402.1 GI:23231347
JP 2002506627-A/89.
                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                   GTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGA
                                                                                                                                                                                                                                                                                                 GATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCC 1606
                                                                                                                                                                                                                                                                                                                                                           CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCCTTAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                   CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGAAACCAAAAACCCTGGCAGCCTCCTGCAGCTGCCCACACAGAGGCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGC 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-MAR-1999 JP 2000536733

19-MAR-1998 US 60/078566,19-MAR-1998 US 60/078576

19-MAR-1998 US 60/078573,19-MAR-1998 US 60/078574 PR

18-1998 US 60/078579,19-MAR-1998 US 60/078578 PR
                                                                                                                                                                                                                 1892 proteins.
                                                                                                                                                                                                                           ģ
                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                               1600
                                                                                                                                                                                                                           linear
                                                                                                              Kyaw, H., E
                                                                                                                                                      Euteleostomi;
                                                                                                                                                                                                                           PAT
                                                                                                                                                                                                                           18-SEP-2002
                         PR
                                                                                                                                                                                                                                                                                                                                       1570
                                                                                                                                                                                                                                                                                                                                                                                                                      1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1090
                                                                                                                                                                                                                                                                                                                    1564
                                                                                                                                                                                                                                                                                                                                                                               1510
                                                                                                                                                                                                                                                                                                                                                                                                  1444
                                                                                                                                                                                                                                                                                                                                                                                                                                           1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1204
                                                                                                                                                                                                                                                                                                                                                            1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                964
                                밁
                                               Ş
                                                                       뮍
                                                                                      S
                                                                                                         밁
                                                                                                                             δ
                                                                                                                                                     밁
                                                                                                                                                                   δ
                                                                                                                                                                                           В
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1794; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            573
                                                                        502
                                                                                                              442
                                                                                                                                  453
                                                                                                                                                      382
                                                                                                                                                                         393
                                                                                                                                                                                              322
                                                                                                                                                                                                                                     262
                                                                                                                                                                                                                                                        273
                                                                                                                                                                                                                                                                             202
                                                                                                                                                                                                                                                                                               213
                                                                                                                                                                                                                                                                                                                   142
                                                                                                                                                                                                                                                                                                                                       153
                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                                                                                                                                                                                                                      \mathfrak{S}_{\mathfrak{S}}
   CAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGA
```

```
19-MAR-1998 US 60/078581,19-MAR-1998 US 19-MAR-1998 US 60/078563,01-APR-1998 US 01-APR-1998 US 0
CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                      CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                  CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACCACGATGACCTCCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                   CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCCCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C12N15/00,A61K37/02,C12N5/00
95 human secretory proteins
Key Location/Quassource 1. .1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REINHARD EBNER, DAVID W LAFLEUR, HENRIK S OLSEN, YANGGU SHI, PAU A MOORE C12N15/09, A61K38/00, A61K48/00, A61P43/00, C07K14/47, C07K16/18, C12N1/15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Homo sapiens
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67.8%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          secretory proteins
Location/Qualifiers
1. .1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1284; DI
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12Q1/68, G01N33/53, G01N33/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENDRESS, ROXANNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (human);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/078577
60/080314
60/080313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SHI, PAUL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STEVEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DUAN,
   621
                                                            632
                                                                                                                            561
                                                                                                                                                                                      572
                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                      512
                                                                                                                                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                                                                                                                                                                                   452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
```

CAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACAAGAACACAAGCAGGAAGA

```
CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                       chéredecreandece de la company de la company
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCG 1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACTICTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         firedddaadreddreffalaedeerreddeeddaeacacargrefaetheere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGTCCTTGG 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG 1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ráccifecaticatian cececa de a construir de la 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            certerrácia de receiva de la construcción de la con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAA 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATGAAATGAAATAATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAG 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠŦŦŦĊĀĊŦĊŦĠĀĀŦĊŦĊŦĀŦĊŦŦĊŦĀĀĊĊĊŦŦĊĊŦŤŦŶĠĊŦĊĊĊĊĠĠĠŦĀĊĠĀĠĀĀĠŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A CAGGGGA CTAAGGA OGGACGGGAGGCTGTGTGTCTCAGCTGCAGACAGACTCAGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      752
                                                                                                             Ś
                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
CQ722423:
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 769; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                    1268
                                                                                                                                                                                                                                                                         1208 CAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCCTTTGTCAGCC 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1088
                                                                                                                                                                                 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   848 CTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1759
GCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTG 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1773
                                                                                                                                                                                                                                                                                                                                                                                                                                 GACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACT
                                                                                                                          CCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGA 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTACATGGAGGAGAGATCCTTGGTTTCGGGAAAGTCGGTCTGTGACAGCCTTTGGGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a c r de da da da de como de como como de como
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: WO 02068579-A 8357 06-SEP-2002; PE Corporation (NY) (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Venter,C.J., Adams,M.C., Li,P.W. and Myers,E.W. Kits, such as nucleic acid arrays, comprising a majority of humanexons or transcripts, for detecting expression and other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQ722423 229 bp DNA Sequence 8357 from Patent WO02068579. CQ722423 CQ722423.1 GI:42283280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DN/
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37.9%; Score 719; DB 6; Length 22
99.9%; Pred. No. 0;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Length 2299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-FEB-2004
                                                                                                                                                                                                      1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1147
                                                                                                                                                                                                                                                                                                                                                                                                                                     775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1832
```

Ş 밁 Ś 밁 5 DЬ Ş B Ş 밁 Ś 밁 á 망 Ś 밁 Ś 문 Ş В S 문 5 뫄 S В Ş 밁 Ś 밁 Ś В Ş В Ş B

1639

1519

1459

1400 1413 1340 1353 1280

1221 1293

1233 1161 1173

982 993 922 933 862 873

802

742

/organism="Homo sapiens" //mol_type="genomic DNA" //mol_type="genomic D	PD 19-M PF 17-D PF C12N C12N1/21 PC C12N1/21 PC C12N1 CC seqr	RESULT 7 BD139445 BD139445 BD139445 BD139445 BD139445 BEFINITION ACCESSION BD139445 BD13945 BD139445 BD13945 B	Db 896 GCTTTTACGGGCTGGATTTGTACGGTGGCCTCCACATGGACTTCTGGTGTGCCCGGCTTG 955  Qy 1388 CCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCT 1447
RESULT 8 AC135892 LOCUS LOCUS DEFINITIO ACCESSION VERSION KEYWORDS SOURCE ORGANIC REFERENCI AUTHORA	B & B & B & B & B & B & B & B & B & B &	S B S B S B S B S	D Q D Q D Q D Q D Q D D D D D D D D D D
/c AC135892 AC135892 AC135892 AC135892 ON Homo sapiens 12 BAC RP11-433J6 (Roswell Park Cancer Institute Human BAC Library) complete sequence.  N AC135892 AC135892.1 GI:24371346 HTG. Homo sapiens (human) Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.  1 (bases 1 to 56520) Muznyo.M., Adams,C., Adio-Oduola,B., Ali-osman,F.R., Allen,C., Alsbrooks,S.L., Amaratunge,H.C., Are,J.R., Ayele,M., Banks,T., Barbaria,J., Bowie,S., Bimage,K., Blankenburg,K., Bonnin,D., Buck,J., Bowie,S., Brieva,M., Brown,E., Byrd,N.C., Burch,P., Burkett,C., Burell,K.L., Byrd,N.C., Carron,T.F., Carter,M., Cavazos,S.R., Chacko,J., Chavez,D., Chen,G., Chen,R., Chen,Z., Chiu,D., Chowdhry,I., Christopoulos,C., Cleveland,C.D., Cox,C., Coyle,M.D., Dathorne,S.R., David,R.,	AAGTAGAGTGAAATGAATGAAATATTATGATGAGAACTCCTACTGGAGAAAGCAGAAAAAA 983  AAATAGATGAAATGAAATGAAATATGAAGAGAACAGAAC	450 TCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACC	

standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and measures of base quality are listed below. Description of the metrics can be found at URL:

```
Davila, M.L., Davis, C., Davy-Carroll, L., Dederich, D.A., Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Diraper, H., Dugan-Rocha, S., Durbin, K.J., Escotto, M., Edgar, D., Edwards, C.C., Elhaj, C., Emerling, S., Escotto, M., Falls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Gabisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Frantz, P., Gabisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Hamilton, K., Han, J., Harris, C., Harris, K., Hart, M., Haylak, P., Hallak, P., Hanliton, K., Han, J., Harris, C., Harris, K., Hart, M., Hogues, M., Holloway, C., Hollins, B., Homsi, F., Howard, S., Huber, J., Hulyk, S., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Kelly, S., Khan, U., Leal, B., Lee, E., Lewis, L.C., Lewis, L., Li, J., Li, Z., Lichtarge, O., Lieu, C., Itiu, J., Liu, M., Loulseged, H., Lozado, R.J., Lu, X., Martinde, J., Martinde, A., Martinez, E., Massey, E., Martinde, A., Martinez, E., Massey, E., Martinde, A., Martinez, E., Massey, E., Metzer, M., Miller, A., Miner, G., Miner, Z., Mitchell, T., Neal, D., Nelson, E., Newtson, J., Newtson, 
Worley, K.C.
Direct Submission
                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                          Unpublished
                                                                                                                 (bases 1 to 56520)
```

Submitted (25-OCT-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA INFORMATION: http://www.hgsc.bcm.tmc.edu/ or email

TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL

COMMENT

CLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are only sequenced and submitted once, so the sequence for the remainder of the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the reatures listing.

ANNOTATION OF FEATURES:

STSs are identified using ePCR (Genome Res. 7:541-550) searches of a local database that includes entries from dbSTS, GDB, and local mapping efforts.

Repeats are identified using RepeatMasker (A. Smit and P. Green, unpublished.) for Human and Mouse sequences.

Genes and Region of sequence similarity are identified by BLAST (Nuc. Acids Res. 25:3389-3402) seimilarity (expect < 1e-34) to the flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.

SEQUENCING READ COVERAGE: Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.

QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality

repeat\_region source http://www.hgsc.bcm.tmc.edu:8088/quality.info/genbank.annotation.html. /rpt\_family="Alusx" 23341. .23642 /rpt\_family="Charliel" 19240. 19360 complement (17438. .17647)
/rpt\_family="L2" rpt\_tamily="Charliel" |9407. .19494 standard /rpt\_fami 15512. .1 complement (14751. .14912)
/rpt\_family="MIR" /rpt\_family="AluJb"

complement(10512. 10000)
/rpt\_family="AluJb" /rpt\_family="Alusg" 16350. .16516 2080. .2156 /rpt\_family="CT-rich" 4191 rpt\_family="C-rich" 4222. .14370 /mol\_type="genomic\_DN /db\_xref="taxon:9606" /chromosome="12" /organism="Homo sapiens" /mol type="genomic DNA" rpt\_family="Alusx" Location/Qualifiers clone="RP11-433J6" \_family="Alusq" family="AluJb" family="Alusx" fami family="Alusq" family="AluJb" \_family="GA-rich" family="Alusx" family="(CA)n" family="L2" family="AluSq" family="MIR" \_family="CT-rich" \_family="(CA)n" \_family="(CGGGG)n" tamily="Alusp" .19092 family="AluSg" ly="MIR" name="SHGC-31323" Y="AluSx"

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                       Ś
                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                      밁
                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity Matches 471; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                          44450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44690
                                                                                                                                                                                                                                                                                                                                                                                                                                      44510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44570
                                                                                                                                                                                                                                                                   822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          522 AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGAGGGGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCCGCAGAGCACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA
                            GAATGAAATATATGATGAGAAACTCCTACTGGAGAAACCAAAAACCCTGGCAG
                                                                                                                                   TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT 941
                                                                                                                                                                                                             TGAATCTCTATCTTAACCCTTCCTCTTTTGCTCCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                     TGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                       GCAAGGAGTGGAGCACAGGAGCCGACAAGAACACAAGCAGGAAGAGGGGGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (28531. .28710)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /rpt_family="AluJo"
26683..27067
/rpt_family="AluJo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rpt family="LIMB4"
25227. .25521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /rpt_tamly=\......24688)
complement(24424. .24688)
/rpt_family="L1MB4"
/rpt__family="L1MB4"
/rpt__family="L1MB4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rpt_fami
24355..2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complement (28094. .28403)
/rpt_family="Aluy"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /rpt_family="AluSx"
complement(26372. .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement (23732. .23848)
/rpt family="L2"
23932. .24066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt_family="127285. .27390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rpt_family="Aluy"
complement(25873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            complement (24689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24.9%; bred. No. 100.0%; Pred. No. 100.0%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fami
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="AluJo"
[1.2677]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family="AluSp"
ement(25002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _fam:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _family="AluSg/x"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _family="AluY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         family="(CAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family="AluSq"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .24391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .25820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .24415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nily="Alu8g/x"
24237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ily="Alu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . Ly="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ly="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.2e-262;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 56520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
44220
                                                   992
                                                                                                                                                                                                                                                                                                                                                                             821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                             4433
                                                                                                                                                                                                                                                                                                                          44391
                                                                                                                                                                                                                                                                                                                                                                                                                                   4445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

S

```
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
AC079387/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Muzny, D. M., Adams, C., Bailey, M., Barbaria, J., Blankenburg, K., Bodota, B., Bouck, J., Bowle, S., Brooks, A., Buhay, C., Bunac, C., Burrows, J., Carter, M., Chacko, J., Chen, Z., Cox, C., David, R., Delgado, O., Deshazo, D., Ding, Y., Domah-Rashid, N., Dugan-Rocha, S., Durbin, K. J., Fernandez, C., Ferraguto, D., Dugan-Rocha, S., Durbin, K. J., Fernandez, C., Ferraguto, D., Forcum-Tansey, J., Frantz, P., Ganesh, R., Gorrell, J. H., Gorrell, J. H., Guevara, W., Harris, K., Hernandez, J., Hodgson, A., Hogues, M., Holloway, C., Hosak, H., Jackson, L. E., Jackson, L., Jia, Y., Jones, M., Kelly, S., Kondejewski, N., Kong, Y., Kovar, C., Leal, B., Li, Z., Lichtarge, O., Liu, J., Liu, W., Logan, O., Lozado, R. J., Lu, J., Lichtarge, O., Liu, J., Liu, W., Logan, O., Lozado, R. J., Lu, J., Lichtarge, O., Liu, J., Loyado, R., Nguyen, N., Nguyen, S., Oswal, G., Parish, B., Paxton, S., Payton, B., Perez, L., Pu, L., Oswal, G., Parish, B., Paxton, S., Payton, B., Perez, L., Pu, L., Shah, E., Shen, H., Simon, M., Sparks, A., Stamps, A., Sucgang, R., Tabor, P., Taylor, T., Vasquez, L., Vinson, R., Vo, O., Wahbah, M., Watlington, S., Weinstock, G., Weinstock, I. R., Williamson, A., Wolley, K., Wren, J., Wrensford, G., Yu, W., Zhou, X., Nelson, D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gibbs, R.
Direct Submission
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (01-SEP-2000) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On or before Sep 1, 2000 this sequence version replaced gi:4589937, gi:4926836, gi:4589938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  245880 bp DNA linear HTG 01-SEP-2000 Homo sapiens chromosome 12 clone RP4-761J14, RP11-433J6, *** SEQUENCING IN PROGRESS ***, 42 unordered pieces. AC079387 AC006087 AC007438 AC006086 AC079387.1 GI:9961230 HTG; HTGS PHACE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Worley, K.C.
Direct Submission
                                                                  * NOTE: Estimated insert size may differ from sequence length

(see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft data.html).

* NOTE: This is a 'working draft' sequence. It currently

* NOTE: This is a 'working draft' sequence. It currently

* consists of 42 contigs. The true order of the pieces

* is not known and their order in this sequence record is

* arbitrary. Gaps between the contigs are represented as

* runs of N, but the exact sizes of the gaps are unknown.

* This record will be updated with the finished sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 245880)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 245880)
                                                                                                                                                                                                                                                                                                                                                                                                   Sequencing vector: M13; L08821
Chemistry: Dye-primer Bodipy: 92% of reads
Chemistry: Dye-terminator Big Dye: 7% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 214565 bases at least Q40
Consensus quality: 230283 bases at least Q30
Consensus quality: 230000 bases at least Q20
Estimated insert size: 29807; agarose-fp estimation
Quality coverage: 0x in Q20 bases; agarose-fp estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Center project Information
Center project name: J-31
Center clone name: RP4-76.1014, RP11-433J6
Center Clome name RP4-76.1014, RP11-433J6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Web site: http://www.hgsc.bcm.tmc.edu/Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center: Baylor College of Medicine
Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -- Genome Center
```

27068: contig of 27068 bp in length 27168: gap of unknown length

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
HUMYP42A04
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 471; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     65572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65752 Adridaciada Acciccada cerreca de ceres de cerca de desercia de cerca de ceres 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65692
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 516)

Woessner,J., Tan,F., Marra,M., Kucaba,T., Yandell,M., Martin,J., Marth,G., Bowles,L., Wylie,T., Bowers,Y., Steptoe,M., Theising,B., Gelsel,S., Allen,M., Underwood,K., Chappell,J., Person,B., Gibbons,M., Harvey,N., Pape,D., Chamberlain,A., Morales,R., Schurk,R., Ritter,E., Kohn,S., Swaller,T., Behymer,K., Hillier,L., Wilson,R. and Waterston,R.

Wilson,R. and Waterston,R.

Pull Clone Sequencing of the Longest Available Member from Each
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           942 GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAG 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         582 GCTCCTACAATCCTTCTTCTCCCTTGGGAGGCCAGGAGCAAGCGACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                        Homo sapiens full length
AF085884
AF085884.1 GI:3483214
FLI_CDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HUMYP42A04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TĊĊŦĀŦĠĀŦĀĀŦĠĠĀĠĀĀĊĀŦĊĊĀĠĠĀĠĊŦĊĀŦŦĊĠĀŦĊĀĠĆĊĊĀĠĠĀĀĀŤĀĠĀŤĠĀĀĀŤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAATCTCTAACCTTAACCCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGAGGGGCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240851
240951
242141
242241
242241
243505
243605
244750
244750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24.9%; Score 471; DB 2; Le ilarity 100.0%; Pred. No. 2.9e-262; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0851 240950: gap of unknown length
0951 242140: contig of 1190 bp in length
2141 242240: gap of unknown length
2241 243504: contig of 1264 bp in length
3505 243604: gap of unknown length
3605 244749: contig of 1264 bp in length
4750 244849: gap of unknown length
4750 244849: gap of unknown length
4850 245880: contig of 1031 bp in length
Location/Qualifiers
1. 245880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol type="genomic DNA"
/db xref="taxon:9606"
/chromosome="12"
/clone="RP4-761J14, RP11-433J6"
                                                                                                                                                                                                                                                                                                                                                                                                                    516 bp mRNA
insert cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                    linear
PP42A04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 245880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 29-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

51197: contig of 24029 bp in length
89527: contig of 3230 bp in length
10861: gap of unknown length
12945: gap of unknown length
143034: contig of 13579 bp in length
143034: contig of 13579 bp in length
160220: gap of unknown length
160220: gap of unknown length
160220: contig of 16986 bp in length
160220: gap of unknown length
160230: contig of 6932 bp in length
160230: gap of unknown length

186169 178027

224927 226225 226225 227923 228023 229065 229165 230620 231848 231848 231844 233514 234861 234961 234961 235969 237922 237922 237922 237922

```
S
                                                                                                                           밁
                                                                                                                                                 á
                                                                                                                                                                                       В
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
REFERENCE
AUTHORS
TITLE
                  Ś
                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                         Matches 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                         1617
                                                                                                                                                            1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Sequencing Center Genome Sequencing Center Department of Genetics Washington University St. Louis MO 63108, USA http://genome.wustl.edu/gscmailto:est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY INFORMATION:
similar to Sus scrofa domestica protein A54424 (PID:g1082952)
acrosomal protein sp32 precursor - pig (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOTICE: This sequence represents the full insert of this cDNA. No attempt has been made to verify whether this corresponds to the full-length of the original mRNA from which it was derived. We have tried to obtain double-stranded, or double chemistry sequence across the entire clone, but potentially, there are areas in the sequence where this level of coverage was not achieved. Nevertheless, we are confident of the accuracy of this sequence as all regions of low quality, as defined by PHRAP (P. Green, in preparation), were visually inspected and edited accordingly. The consensus quality values for this sequence have been submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (24-AUG-1998) Department of Genetics,
Submitted (24-AUG-1998) Park Avenue, St. Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The location of this clone is unknown Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unigene Cluster
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Waterston,R.
                                                                                                                                                                                                           TGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGG
                                                                                                                                                                                                                                                                            GGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAG
                                                                                                                                                                                                                                                       GGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAG
                TTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAA
                                                              TGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACAT
                                                                                        TGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACAT
                                                                                                                          ATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTT
                                                                                                                                                        ATGAGCTGGCGTCTATTCTGCCCACACCCCCAGCCCAACCTGCCCACGTTCTCTATTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 516)
                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="similar to Cavia porcellus protein B54424 (PID:91083834)"
178. .297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lik
178. .297
                                                                                                                                                                                                                                                                                                                                                                                                      /note="similar to Sus (PID:g1082952)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="similar to Mus musculus protein D17573
(PDD:9516784)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:190062"
                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                       17.9%; Score 339; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lib="Soares_retina_N2b5HR"
                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     scrofa domestica protein A54424
                                                                                                                                                                                                                                                                                                                                         4.7e-185;
                                                                                                                                                                                                                                                                                                                                                        DB 9;
                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Washington
Missouri 63108,
                                                                                                                                                                                                                                                                                                                      0
                           1856
                                                                                           1796
                                                                                                                                                        1736
                                                                                                                                                                                                                         1676
                                                                                                                                                                                                                                                                                       1616
476
                                                             416
                                                                                                                                                                                                                                                       236
                                                                                                                           356
                                                                                                                                                                                        296
                                                                                                                                                                                                                                                                                                                      0
                                          RESULT 12
BD179252
LOCUS
           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
BD060281
LOCUS
                                                                                                                                                     Ś
                                                                                                                                                                                       밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1857
                                                                                                                                                                                                                         594
                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                      534
                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                        474
                                                                                                                                                                                                                                                                                                                                                                                                                                                         281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zea mays
Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD060281.1 GI:22605887 JP 2001518793-A/641.
                                            BD179252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DAVID MERBERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14.8%;
```

```
414 GTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGC
                                                                                                                                                                                                                        654 GCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGG 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 GIGITCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jacobs, K., McCoy, J.M., Lavallie, E.R., Racie, L.A., Treacy, M., Spaulding, V. and Agostino, M.J. Secreted expressed sequence tags (s857s) Patent: JP 2001518793-A 641 16-OCT-2001; GENETICS INSTITUTE INC PN JP 2001518793-A/641

PD 16-OCT-2001
Cancer associated gene. BD179252 BD179252.1 GI:30016521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO PC C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC Strai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 308)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAAGTCTCACCCACCACGATGACCTCCCCCCATCTCACCCCCACTTCACAGTGACAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                    CCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATC
                                                                                                                                                                                                                                                                                              AAGATGACTTTACATAAAATGTTGATCTTCAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                          CCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGATGACTTTACATAAAATGTTGATCTTCAAAAAAAA 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-APR-1998 JP 1998543070
10-APR-1997 US 08/837312
KENNETH JACOBS,JOHN M MCCOY,EDWARD R LAVALLIE,LISA A RACIE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Zea mays"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 281; DB 6; L
Pred. No. 3.3e-151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                     507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308
                                                                   ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA (SESTS).
                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                     PAT 16-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                 653
                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                       593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ΡI
```

```
KEYWORDS
SOURCE
                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                      RESULT 13
BD179034
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 330; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OS Homo sapiens (human)
PN WO 02083899-A/230
PD 24-OCT-2002
PF 28-MAR-2002 WO 2002JP003038
PF 10-APR-2001 JP 01P 112039,21-SEP-2001 JP 01P 290193 PI
POSHIE YOSHIKAWA, SACHIKO OKAMOTO, TOMONORI OURA, JUNICHI PI
I KUNOSHIN KATO, HIROSHI INOUE, MASAKI MORI
PI IKUNOSHIN KATO, HIROSHI INOUE, MASAKI MORI
PC C12N15/12, C07K14/82, C07K16/32, C12P21/08, C12Q1/68, A61K39/395,
PC A61F35/00, 601N33/50, G01N33/53
PC Cancer associated gene
FH Key Location/Qualifiers
FT source 1.507
FT fource 1.507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1616 GTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAGGACCTTTGACTCTAGGCCAGTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      236
                                                                                                                                                  Cancer associated gene. BD179034 GI:30016302 WO 02083899-A/12.
                                                                                                                              Homo
                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                          BD179034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGATGACTTTACATAAAATGTTGATCTTC 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATGACTTTACATAAAATGTTGATCTTC 1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

1 (bases 1 to 507)

Yoshikawa, Y., Okamoto, S., Oura, T., Junichi, Mineno, Asada, K., Kato, I., Inous, H. and Mori, M.

Kato, I., Inous, H. and Mori, M.

Cancer associated gene

Patent: WO 02083899-A 230 24-OCT-2002;

TAKARA SHUZO CO LTD, YOSHIE YOSHIKAWA, SACHIKO OKAMOTO, TOMONORI OURA, JUNICHI MINENO, KIYOZO ASADA, IKUNOSHIN KATO, HIROSHI INOUE, MASAKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTA 1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTT 1735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCATGGTGGGAGCTGCGCCCCTCCTTA 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrdadaccccarrdcrrrcaddcrdccccrrcrddcrcrdrracrcddccccracrcaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTTTACTTGGGCCCCTACTCACA 1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         drdaddacdrrdidciricdarddadccaddagrrcadcaccrrdaccrcraddccadrrcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Addrigricios de la marcia del marcia de la marcia del marcia de la marcia del dela marcia del la marcia del la marcia del dela marcia del la marcia del la marcia del la marcia dela marcia del la marcia dela marcia del la marcia dela marcia del la marcia del la marcia dela marcia dela marcia dela marcia del la marcia del la marcia dela marcia dela marcia dela marcia del la marcia dela marcia dela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                         sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02083899-A/230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 280; DB 6; Pred. No. 1.2e-150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                          ďφ
                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 507;
                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                 PAT 16-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۰,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
G23540/c
LOCUS
                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 330; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                              G23540.
G23540.1 GI:1343866
STS; STS sequence; primer; s
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1796 TITICCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCCCTTA 1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1736 TTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACA 1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MORI

OS Homo sapiens (human)

PN W0 02083899-A/12

PD 24-OCT-2002

PD 24-OCT-2002

PR 10-APR-2001 JP 01P 112039,21-SEP-2001 JP 01P 290193 PI

MINENO, KIYOZO ASADA,

PI IKUNOSHIN KATO, HIROSHI INOUE, MASAKI MORI

PC C12N15/12,CO7K14/82,C07K16/32,C12P21/08,C12Q1/68,A61K39/395,

PC A61P35/00,G01N33/50,G01N33/53

CC Cancer associated gene

Rey Location/Qualifiers

FT source 1.522

FT Source 1.522

FT Corpanism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1616 GTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACCTCTAGGCCAGTTCG 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1556 AGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAA 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 391)
                                                                                                                                                                                                                                                                                                                  G23540 391
human STS WI-30262, sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGATGACTTTACATAAAATGTTGATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 522)

Yoshikawa,Y., Okamoto,S., Oura,T., Junichi, Mineno, Asada,K., Kato,I., Inoue,H. and Mori,M.
Cancer associated gene
Patent: WO 02083899-A 12 24-OCT-2002;
TAKKAR SHUZO CO LTD, YOSHIE YOSHIKAWA, SACHIKO OKAMOTO, TOMONORI OURA, JUNICHI MINENO, KIYOZO ASADA, IKUNOSHIN KATO, HIROSHI INOUE, MASAKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGATGACTTTACATAAAATGTTGATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rtrcctrdddriaddadcaacagteccadadadddcarddraddadctdccccccctra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rtickád de elektrické de recedent elektrické de elektrické
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          droaddacerrerection of the control o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism='Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14.8%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 280; DB
Pred. No. 1.2e
0; Mismatches
                                                                                                                                                                                                   sequence tagged
                                                                                                                                                                                                                                                                                                                      tagged site.
                                                                                                                                                                                                                                                                                                                                                           đq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6; I
                                                                                                                                                                                                                                                                                                                                                           DNA
```

sapiens

(human)'.

Length 522;

Indels

0,

Gaps

linear

STS

31-MAY-1996

475

415

```
RESULT 15
AX968632
                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                         primer_bind
primer_bind
ORIGIN
                                                                                                                                                                                     Ś
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                            ş
                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                       Query Match 7.9%;
Best Local Similarity 99.5%;
                                                                                                                                                                                                                                                                                                                                                          Matches 199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                             1761 CCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCC
                                                                                                                                                                                                                                           1701 CACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTTGAGACCCCCATTGCTTTTCAGGCTG
                                                                                                                                                                                                                                                                                                          1641 CCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCA 1700
                                                                                                                             1821 CAGAGAGGGCCACGGTGGGA 1840
                                                                                                                                                             126
                                                                                                                                                                                                                            186 CACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTTGAGACCCCATTGCTTTCAGGCTG
                                                                                                                                                                                                                                                                                          246 CCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTANTCTGCCCA
                                                                                                 66
AX968632
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Whitehead Institute/MIT Center for Genome Research Whitehead Institute for Biomedical Research Scambridge Center, Cambridge MA 02142 USA Tel: 617 252 1900
Fax: 617 252 1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer A: AGTCATCTTTTAAGGAGGCG
primer B: AGACCCCATTGCTTTCAGG
STS size: 126
PCR Profile:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mapped STSs
Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hudson,T.
Whitehead Institute/MIT Center for Genome Research; Physically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protocol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: thudson@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Thomas Hudson
                                                                                                                                                            CCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Template: 10 ng
Primer: each 5 pM
dNTPs: each 4 nM
Tag Polymerase: 0.025 u
Total Vol: 20 ul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MgCl2: 1.5 mM
KCl: 50 mM
Tris-HCL: 10 mM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PH:
                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Annealing: 56 degrees C
Polymerization:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR Cycles: 35
Thermal Cycler:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Denaturation:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    resoak:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  from dbEST (genbank accession H30251).
Location/Qualifiers
1. .391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9.3
 128 bp
60 from Patent EP1378571.
                                                                                                                                                                                                                                                                                                                                                                                                                                        complement (130. .148)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="texaon:9606"
/maD="83.0 cR from top of Chr12 linkage group"
                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                        Score 149; DB 11;
Pred. No. 3.1e-74;
0; Mismatches 1;
                                                                                                 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    units/ul
                  DNA
                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                      Length
                  linear
                                                                                                                                                                                                                                                                                                                                                                                         391;
                PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                            1820
                                                                                                                                                                                                                                                        1760
                                                                                                                                                                                                                                                                                        187
                                                                                                                                                            67
                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                                                                      0
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
Search completed: March
Job time : 8330 secs
                                                                                   Ś
                                                         밁
                                                                                                                  밁
                                                                                                                                       5
                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                           Best
                                                                                                                                                                            Matches
                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                             sig_peptide
                                                                                                                                                                                         Local Similarity
                                                         62
                                                                              90 GGTGCTGCTCCTGCCACCTGCCACCCGCAGCCCCAGGATTCGACTCAGGCC 141
                                                                                                                                               30
                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                  Dumas Milne Edwards,J.B., Duclert,A. and Lacroix,B. 5' ESTs for secreted proteins expressed in various tissues Patent: Ep 1378571-A 60 07-JAN-2004; GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX968632
AX968632.1 GI:40975063
                                                                                                                    GGTGCTGCTCCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCC 113
                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol type="unassigned DNA"
/db_xref="taxon:9606"
/tissue_type="TESTIS"
21. .95
                                                                                                                                                                                                                                                   /note="SCORE 8.5 SEQ LKVLLLPLAPAAA"
                                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
             ω,
                                                                                                                                                                                      5.9%;
             2005, 01:39:08
                                                                                                                                                                                      Score 112; DB 6; pred. No. 1.3e-52;
                                                                                                                                                                            <u>.</u>
                                                                                                                                                                            Mismatches
                                                                                                                                                                                                     Length 128;
                                                                                                                                                                            Indels
                                                                                                                                                                          0
                                                                                                                                                                          Gaps
                                                                                                                    61
                                                                                                                                                                            0
```

OLISH NAMALE HEART

.

^

옻

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        earched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic
        score
and is
                                                                                                                                                                                                                                                           Pred. No.
                                                                                                                                                                Score
      1895
1886
1886
1632
1530
1494
1284
1284
1284
173
                                                                                                                                                                                                                                  μ.
α
                                                                                                                                                                                                                               greater than
s derived by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic search, using sw
                                                                                                                                                                %
Query
Match
                                                                                                                                                                                                                              is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-559-013E-23
1895
1 gttagaggcggcttg
     100.0
99.5
99.5
86.1
80.7
78.8
67.8
67.8
61.9
21.9
                                                                                                                                                                                                                                                                                      10:
11:
12:
13:
14:
15:
16:
17:
18:
19:
20:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OLIGO_NUC
Gapop 60.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5401638 seqs,
                                                                                                                                                                                                                                                                            : /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US09_RPUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gttagaggcggcttgtgtcc....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                Length
     8, 2005, 01:39:12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Applications NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                DB
        117
117
117
117
117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2966923429
  US-10-148-641A-23

US-10-262-666-41

US-10-085-117-54

US-10-085-117-54

US-10-719-993-124

US-09-746-783-77

US-09-397-945-90

US-10-653-595-90

US-10-296-115-693

US-09-978-360A-262

US-10-719-993-6794
                                                                                                                                                                Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60.
                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search time 2067 Seconds (without alignments) 5440.077 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ....tgttgatcttcaaaaaaaaa 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10803276
                                                                                                                                                               Description
  Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
  23, Appl
41, Appl
53, Appl
54, Appl
124, Appl
77, Appl
90, Appl
90, Appl
693, App
262, App
262, App
                                                                                  000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
     \begin{array}{c} \textbf{4.4} \\ \textbf{1.1} \\ \textbf{2.2} \\ \textbf{2.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
14
14
14
7
     000
                                        469
24923
     Sequence 52, Appl Sequence 1442, A Sequence 7043, App Sequence 7043, App Sequence 7043, App Sequence 6811, App Sequence 6811, App Sequence 6811, App Sequence 230, App Sequence 2296, App Sequence 2296, App Sequence 2297, App Sequence 17827, A Sequence 17827, A Sequence 15239, A Sequence 15231, A Sequence 15239, A Sequence 15251, A Sequence 27, Appl Sequence 10144, Sequence 106143, Sequence 1170, Appl Sequence 1170, Appl Sequence 1171, Appl Sequence 1179, Appl
```

	•																									
<b>.</b>	153 1 154 1 155 1 156 1 157 1	0000	146 147 148	Մահա			135 136 137			127	C 124 C 125 C 126	121		116 117 118						02	100		20 4 70 70 70		90 90 98	
	18 0. 18 0. 18 0. 18 0. 18 0.	0000											<b>ω ω</b> ω	19	19	19	19 19	19	19	19	19 19	19 19	19 19	19 19	19 19 19	19 19 19
	φφφωί	بْ مَا مَا مَا مَا			9.9	9.9	90.0	900	000	111			- :- :-				<u>, , , , , , , , , , , , , , , , , , , </u>	~ <del>~</del> ~								
	8 9 6 6 3 3	1 4 7 7	277	27	27	210	102	155	208	3841 3841 3841	3197	0267	3588 2705	9458 9458 3588	9759 5606	9759	616	308 408	220	200	183	9 7.	176	ர ப ப	י בי בי וט	<b>.</b>
	99999	8000		999	999	77	988	18 1	8 6	9 9 9	18 13	17	18	13 18 14	17	15	155	155	55.	<u>، بر ب</u>	<b></b>	., ., .,	H 10 I		72 17 72 17 72 17	. W4C
	S-10-24 S-10-08 S-10-24 S-10-08 S-10-85	JS-10-1: JS-10-2: JS-10-2: JS-10-86:	US-10-0 US-10-0 US-10-1	S-09-90 S-09-84 S-09-84	S-09-73	US-10-2	US-10-	US-10- US-09-9: US-10-	US-10- US-09-7	US-09-	US-10-	US-10-	US-10	US-10	US-10	US-10	08-10	7 US-1	7 US-1	US-09	7 US-1	3 US-1	-Sn 8	13 US-	17 US- 17 US- 17 US-	18 US-0
	12-535A 35-783A 12-535A 15-783A 16-499-	13-872- 83-017- 83-017- 83-017-	17-754 17-754 13-872	9-626-	16-457- 16-457- 12-941-	242-535	719-993 719-993 741-600	719-90 33-797 741-601	719-99	795-66	-322-28 )-027-6	-085-1] -240-42 -085-11	-730-0: -730-1:	-322-2	)-373-6 )-085-1	9-984-4 9-557-2 1-271-3	0-373-6	0-378-0 9-814-3	0-027-0	-938-8 -938-	.0-282-	10-027-	10-437- 9-879-5 10-767-	10-027	10-242 10-085 10-425	10-425
	7 US-10-242-535A-24207 7 US-10-085-783A-24207 7 US-10-242-535A-45949 7 US-10-242-535A-45949 8 US-10-856-499-1702 8 US-10-856-499-1702	-1641 -1624 -1624 -1641 25089	-1624 -1641 -1641	1641 1624 1624	1624 1641 1624	5A-10921 5A-10921	3-26332 3-31761	0-444852 -582 1-16895	7-1 3-55318 -118	8-1 6-1	31-115 32-179264	17-97 25-1470	35-3 10-3 92-1966	92-337 81-329	17-253	129-384 232-1	550-10 155-1000	353-20949	122A-8438 632-102111	42A-3447 842A-3447	122A-32579	-632-110125 -632-110125	-963-294 536-244 -701-1233	-632-186996 -632-186996	863-864 -535A-42992 -783A-42992 -115-182040	-115-33221 352-2620
	redunses redunses redunses redunses redunses	Seques Seq Seques Seques Seques Seques Seques Seques Seques Seques Seques Seq Seq Seq Seq Seq Seq Seq Seq Seq Seq	requi	Sequi Sequi	sequ Sequ	sec sec.	Sec	bes bes bes	2 9 8 9 8 9 8	2 20 20 20 40 40	200	8 8 9	ខ្លួន	ໝໝ	വ വ വ	(a) (a)	ro ro r	0 50 50		S			70			
	lence 25 lence 2 lence 2 lence 4 lence 4 lence 4 lence 1 lence 1 lence 1	lence 1	ence 16	ence 10	ence 1	nence	quence quence quence	duence a	quence	equence	equence equence	equence equence	equence	equence equence	equenc	equenc	sequenc	Sequenc	Sequenc	Sequence equence	Sequen	sequen Sequen	Sequenc	Sequer	sequer sequences sequences	Sequenc
i i	Sequence 2508, A Sequence 24207, A Sequence 24207, A Sequence 45949, A Sequence 45949, A Sequence 1702, Ap Sequence 1742, Ap	624, Al 641, Al 624, Al 641, Al	41, Ap 624, A 641, A	524, Ap 541, Ap 524, Ap	524, Ap	25591,	16895, 26332, 31761.	18, Ap 444852 82, Ap	1, App 55318,	e 17926	247, <i>)</i> 115, <i>!</i> e 17926	1966, 97, Aj	3, Ap	337,	e 1, Ap	e 384, e 384, e 1, Ar	e 2094; e 10, 2	e 1021	e 8438	ce 2762	ce 71, ce 3257	ce 1233 ce 1101	Ce 294 e 244,	ice 182	Sequence 42992, A Sequence 42992, A Sequence 42992, A	nce 332
•		0.0.0.0	יטיטי	_	ັ` ⊅	* > > >	× × × '	o , 6	A	4.4.	p p p p	Ap P1 Ap	pli pli	App App	Ďľi Li	App App	θ, A ppl	11, Appl	Ap Ap	Ap Ap	App1	125 Ap	App App	996,	App App 92, A 92, A	3221, A
-		<del></del>				<del>"</del>																				14
-	0.0	0.0.0	· · · · ·						<del>-</del>			<del></del>								· <u>-</u>			<del></del>			-
-		0.0.0	· · · · ·						<del>-</del>			<del></del>						17 17	0	111	o o	0 0		0 0 0		
230 18	224 18 224 18 225 18 226 18 227 18 227 18 228 18 2 229 18	C 219 18 C 220 18 222 18 222 18	C 216 18 C 217 18 C 218 18	213 18 214 18 C 215 18	C 211 18 C 212 18	c 208 18 c 209 18	C 205 18 C 206 18 207 18	203 18 C 204 18	c 200 18	197 18 198 18 C 199 18	C 194 18 C 195 18	192 18 C 193 18	189 190 180	186 18 187 18 188 18	184 18 185 18	C 182 18 183 18	C 180 11	177 1 178 1	175 c 176	172 1 173 1 174 1	c 170 c 171	C 169	165	C 163 C 163	159 160 161	158
230 18 0.9	224 18 0.9 224 18 0.9 225 18 0.9 226 18 0.9 227 18 0.9 228 18 0.9 229 18 0.9	C 2219 18 0.9 C 220 18 0.9 C 221 18 0.9 222 18 0.9	C 216 18 0.9 C 217 18 0.9 C 218 18 0.9	213 18 0.9 214 18 0.9 C 215 18 0.9	C 211 18 0.9 C 212 18 0.9	C 208 18 0.9 C 209 18 0.9	C 205 18 0.9 C 206 18 0.9 207 18 0.9	203 18 0.9 c 204 18 0.9	C 200 18 0.9	197 18 0.9 198 18 0.9	C 194 18 0.9 C 195 18 0.9 C 196 18 0.9	192 18 0.9 c 193 18 0.9	189 18 0.9 190 18 0.9	187 18 0.5 188 18 0.5	184 18 0.1 185 18 0.1	C 182 18 0.	C 181 18 0.	177 18 0. 178 18 0.	175 18 0. C 176 18 0.	172 18 0. 173 18 0. 174 18 0.	C 170 18 0 C 171 18 0	C 169 18 0	165 18 0	C 162 18 0 C 163 18 0	159 18 0 160 18 0	158 18
230 18 0.9 757	224 18 0.9 748 224 18 0.9 748 225 18 0.9 748 226 18 0.9 752 227 18 0.9 752 228 18 0.9 752 C 228 18 0.9 754 C 229 18 0.9 754	C 219 18 0.9 683 C 220 18 0.9 683 C 221 18 0.9 683 C 221 18 0.9 708	C 216 18 0.9 683 C 217 18 0.9 683 C 218 18 0.9 683	213 18 0.9 682 214 18 0.9 682 C 215 18 0.9 683	C 211 18 0.9 663 C 212 18 0.9 663	C 208 18 0.9 63 C 210 18 0.9 63	C 205 18 0.9 63 C 206 18 0.9 63 207 18 0.9 63	203 18 0.9 61 203 18 0.9 63 C 204 18 0.9 63	C 200 18 0.9 60 C 201 18 0.9 61	197 18 0.9 58 198 18 0.9 59	C 194 18 0.9 57 C 196 18 0.9 57	192 18 0.9 51 C 193 18 0.9 51	189 18 0.9 5	186 18 0.9 5 187 18 0.9 5 188 18 0.9 5	184 18 0.9 5	C 182 18 0.9 5	C 181 18 0.9	177 18 0.9 178 18 0.9	175 18 0.9 C 176 18 0.9	172 18 0.9 173 18 0.9 174 10 0.9	C 170 18 0.9 C 171 18 0.9	C 169 18 0.9	165 18 0	C 162 18 0 C 163 18 0	159 18 0 160 18 0	158 18
230 18 0.9 757 1	224 18 0.9 739 1 224 18 0.9 748 1 225 18 0.9 748 1 226 18 0.9 752 1 227 18 0.9 752 1 C 228 18 0.9 752 1 C 229 18 0.9 754 1	C 24.9 18 0.9 683 C 220 18 0.9 683 C 221 18 0.9 704 222 18 0.9 718	C 216 18 0.9 683 C 217 18 0.9 683 C 218 18 0.9 683	213 18 0.9 682 214 18 0.9 682 C 215 18 0.9 683	C 211 18 0.9 635 C 212 18 0.9 663	c 208 18 0.9 635 c 209 18 0.9 635 c 210 18 0.9 635	C 205 18 0.9 635 C 206 18 0.9 635 207 18 0.9 635	202 18 0.9 610 203 18 0.9 635 C 204 18 0.9 635	C 200 18 0.9 605	197 18 0.9 586 198 18 0.9 597 C 199 18 0.9 597	C 194 18 0.9 572 C 195 18 0.9 572 C 196 18 0.9 572	192 18 0.9 560 192 18 0.9 572	189 18 0.9 552 190 18 0.9 552	187 18 0.9 548 188 18 0.9 550	184 18 0.9 54g	C 182 18 0.9 53 183 18 0.9 545	C 180 18 0.9 51	177 18 0.9 50	175 18 0.9 48 C 176 18 0.9 50	172 18 0.9 47 173 18 0.9 47 174 10 0.9 47	C 170 18 0.9 47 C 171 18 0.9 47	C 168 18 0.9 4:	165 18 0.9 4	C 162 18 0.9 4 C 164 18 0.9 4	159 18 0.9 3 160 18 0.9 3	158
230 18 0.9 757 1	224 18 0.9 739 1 224 18 0.9 748 1 225 18 0.9 748 1 226 18 0.9 752 1 227 18 0.9 752 1 C 228 18 0.9 752 1 C 229 18 0.9 754 1	C 24.9 18 0.9 683 C 220 18 0.9 683 C 221 18 0.9 704 222 18 0.9 718	C 216 18 0.9 683 C 217 18 0.9 683 C 218 18 0.9 683	213 18 0.9 682 214 18 0.9 682 C 215 18 0.9 683	C 211 18 0.9 635 C 212 18 0.9 663	c 208 18 0.9 635 c 209 18 0.9 635 c 210 18 0.9 635	C 205 18 0.9 635 C 206 18 0.9 635 207 18 0.9 635	202 18 0.9 610 203 18 0.9 635 C 204 18 0.9 635	C 200 18 0.9 605	197 18 0.9 586 198 18 0.9 597 C 199 18 0.9 597	C 194 18 0.9 572 C 195 18 0.9 572 C 196 18 0.9 572	192 18 0.9 560 192 18 0.9 572	189 18 0.9 552 190 18 0.9 552	187 18 0.9 548 188 18 0.9 550	184 18 0.9 54g	C 182 18 0.9 53 183 18 0.9 545	C 180 18 0.9 51	177 18 0.9 50	175 18 0.9 48 C 176 18 0.9 50	172 18 0.9 47 173 18 0.9 47 174 10 0.9 47	C 170 18 0.9 47 C 171 18 0.9 47	C 168 18 0.9 4:	165 18 0.9 4	C 162 18 0.9 4 C 164 18 0.9 4	159 18 0.9 3 160 18 0.9 3	158
230 18 0.9 757 1	224 18 0.9 739 1 224 18 0.9 748 1 225 18 0.9 748 1 226 18 0.9 752 1 227 18 0.9 752 1 C 228 18 0.9 752 1 C 229 18 0.9 754 1	C 24.9 18 0.9 683 C 220 18 0.9 683 C 221 18 0.9 704 222 18 0.9 718	C 216 18 0.9 683 C 217 18 0.9 683 C 218 18 0.9 683	213 18 0.9 682 214 18 0.9 682 C 215 18 0.9 683	C 211 18 0.9 635 C 212 18 0.9 663	c 208 18 0.9 635 c 209 18 0.9 635 c 210 18 0.9 635	C 205 18 0.9 635 C 206 18 0.9 635 207 18 0.9 635	202 18 0.9 610 203 18 0.9 635 C 204 18 0.9 635	C 200 18 0.9 605	197 18 0.9 586 198 18 0.9 597 C 199 18 0.9 597	C 194 18 0.9 572 C 195 18 0.9 572 C 196 18 0.9 572	192 18 0.9 560 192 18 0.9 572	189 18 0.9 552 190 18 0.9 552	187 18 0.9 548 188 18 0.9 550	184 18 0.9 54g	C 182 18 0.9 53 183 18 0.9 545	C 180 18 0.9 51	177 18 0.9 50	175 18 0.9 48 C 176 18 0.9 50	172 18 0.9 47 173 18 0.9 47 174 10 0.9 47	C 170 18 0.9 47 C 171 18 0.9 47	C 168 18 0.9 4:	165 18 0.9 4	C 162 18 0.9 4 C 164 18 0.9 4	159 18 0.9 3 160 18 0.9 3	158
230 18 0.9 757 1	224 18 0.9 739 1 224 18 0.9 748 1 225 18 0.9 748 1 226 18 0.9 752 1 227 18 0.9 752 1 C 228 18 0.9 752 1 C 229 18 0.9 754 1	C 24.9 18 0.9 683 C 220 18 0.9 683 C 221 18 0.9 704 222 18 0.9 718	C 216 18 0.9 683 C 217 18 0.9 683 C 218 18 0.9 683	213 18 0.9 682 214 18 0.9 682 C 215 18 0.9 683	C 211 18 0.9 635 C 212 18 0.9 663	c 208 18 0.9 635 c 209 18 0.9 635 c 210 18 0.9 635	C 205 18 0.9 635 C 206 18 0.9 635 207 18 0.9 635	202 18 0.9 610 203 18 0.9 635 C 204 18 0.9 635	C 200 18 0.9 605	197 18 0.9 586 198 18 0.9 597 C 199 18 0.9 597	C 194 18 0.9 572 C 195 18 0.9 572 C 196 18 0.9 572	192 18 0.9 560 192 18 0.9 572	189 18 0.9 552 190 18 0.9 552	187 18 0.9 548 188 18 0.9 550	184 18 0.9 54g	C 182 18 0.9 53 183 18 0.9 545	C 180 18 0.9 51	177 18 0.9 50	175 18 0.9 48 C 176 18 0.9 50	172 18 0.9 47 173 18 0.9 47 174 10 0.9 47	C 170 18 0.9 47 C 171 18 0.9 47	C 168 18 0.9 4:	165 18 0.9 4	C 162 18 0.9 4 C 164 18 0.9 4	159 18 0.9 3 160 18 0.9 3	158
230 18 0.9 757 13 US-10-027-632-24072	224 18 0.9 739 17 US-10-424-599-638109 224 18 0.9 748 13 US-10-027-632-151673 225 18 0.9 748 13 US-10-027-632-151673 226 18 0.9 752 13 US-10-027-632-9090 227 18 0.9 752 13 US-10-027-632-9090 228 18 0.9 752 17 US-10-027-632-9090 229 18 0.9 754 9 US-09-731-872-187	C 219 18 0.9 683 17 US-10-027-632-105295 C 220 18 0.9 683 17 US-10-027-632-105296 C 221 18 0.9 704 18 US-10-027-632-105297 222 18 0.9 704 18 US-10-425-115-5350	C 216 18 0.9 683 13 US-10-027-632-105295 C 217 18 0.9 683 13 US-10-027-632-105296 C 218 18 0.9 683 13 US-10-027-632-105297	213 18 0.9 682 13 US-10-027-632-215362 214 18 0.9 682 17 US-10-027-632-215362 215 18 0.9 683 13 US-10-027-632-215362	C 211 18 0.9 635 17 US-10-027-632-233772 C 212 18 0.9 663 18 US-10-357-930-21694	C 208 18 0.9 635 17 US-10-027-632-212320 C 209 18 0.9 635 17 US-10-027-632-233770 C 210 10 0.9 635 17 US-10-027-632-233770	C 205 18 0.9 635 13 US-10-027-632-233770 C 206 18 0.9 635 13 US-10-027-632-233772 207 18 0.9 635 13 US-10-027-632-233772	203 18 0.9 630 17 US-10-027-632-106700 203 18 0.9 635 13 US-10-027-632-212320 204 18 0.9 635 13 HTC 10-027-632-212320	C 200 18 0.9 605 9 US-09-731-872-189 C 201 18 0.9 610 13 US-09-876-997-189 C 201 18 0.9 610 13 US-10-027-6-397-189	197 18 0.9 5/4 1/ US-10-027-632-236429 198 18 0.9 588 16 US-10-029-386-2292 C 199 16 0.9 597 9 US-09-864-761-8350	C 194 18 0.9 572 13 US-10-27-632-236428 C 195 18 0.9 572 13 US-10-027-632-236428 C 196 18 0.9 572 17 US-10-027-633-236428	192 18 0.9 560 17 US-10-424-599-57181 192 18 0.9 568 18 US-10-767-701-3681	189 18 0.9 552 17 US-10-027-632-194694	185 18 0.9 548 17 US-10-027-632-395893 187 18 0.9 550 9 US-09-918-686-12	184 18 0.9 548 13 US-10-027-632-95893 185 18 0.9 548 17 US-10-027-632-305915	C 182 18 0.9 531 13 US-10-027-632-267958 183 18 0.9 548 17 US-10-027-632-267958	C 180 18 0.9 514 16 US-10-029-386-6796 C 181 18 0.9 528 9 US-09-770-152-883	177 18 0.9 502 16 US-10-029-386-7398 178 18 0.9 502 18 US-10-029-386-7365 6 179 50 502 18 US-10-437-66 5-65	175 18 0.9 481 17 US-10-242-535A-17111 C 176 18 0.9 50 17 US-10-085-783A-17111	172 18 0.9 471 17 US-10-027-632-296512 173 18 0.9 471 17 US-10-242-535A-44034 18 0.9 471 17 US-10-085-783A-44034 174 18 0.9 471 17 US-10-085-783A-44034 18 0.9 471	C 170 18 0.9 471 13 US-10-027-632-29655 C 171 18 0.9 471 17 US-10-027-632-64569	C 169 16 0.9 463 10 US-10-085-783A-32320 C 169 0.9 471 13 US-10-027-632-64560	165 18 0.9 461 17 US-10-066-543-263-263-263-263-263-263-263-263-263-26	C 162 18 0.9 4.2 17 US-10-424-599-99262 C 163 18 0.9 4.2 17 US-10-424-599-10322 C 164 10 0.9 451 18 US-10-425-115-114-00	159 18 0.9 363 17 US-10-242-535A-2804 160 18 0.9 363 17 US-10-085-783A-2804 161 18 0.9 374 17 US-10-425-115-11954	158
230 18 0.9 757 13 US-10-027-632-24072	224 18 0.9 739 17 US-10-424-599-638109 224 18 0.9 748 13 US-10-027-632-151673 225 18 0.9 748 13 US-10-027-632-151673 226 18 0.9 752 13 US-10-027-632-9090 227 18 0.9 752 13 US-10-027-632-9090 228 18 0.9 752 17 US-10-027-632-9090 229 18 0.9 754 9 US-09-731-872-187	C 219 18 0.9 683 17 US-10-027-632-105295 C 220 18 0.9 683 17 US-10-027-632-105296 C 221 18 0.9 704 18 US-10-027-632-105297 222 18 0.9 704 18 US-10-425-115-5350	C 216 18 0.9 683 13 US-10-027-632-105295 C 217 18 0.9 683 13 US-10-027-632-105296 C 218 18 0.9 683 13 US-10-027-632-105297	213 18 0.9 682 13 US-10-027-632-215362 214 18 0.9 682 17 US-10-027-632-215362 215 18 0.9 683 13 US-10-027-632-215362	C 211 18 0.9 635 17 US-10-027-632-233772 C 212 18 0.9 663 18 US-10-357-930-21694	C 208 18 0.9 635 17 US-10-027-632-212320 C 209 18 0.9 635 17 US-10-027-632-233770 C 210 10 0.9 635 17 US-10-027-632-233770	C 205 18 0.9 635 13 US-10-027-632-233770 C 206 18 0.9 635 13 US-10-027-632-233772 207 18 0.9 635 13 US-10-027-632-233772	203 18 0.9 630 17 US-10-027-632-106700 203 18 0.9 635 13 US-10-027-632-212320 204 18 0.9 635 13 HTC 10-027-632-212320	C 200 18 0.9 605 9 US-09-731-872-189 C 201 18 0.9 610 13 US-09-876-997-189 C 201 18 0.9 610 13 US-10-027-6-397-189	197 18 0.9 5/4 1/ US-10-027-632-236429 198 18 0.9 588 16 US-10-029-386-2292 C 199 16 0.9 597 9 US-09-864-761-8350	C 194 18 0.9 572 13 US-10-27-632-236428 C 195 18 0.9 572 13 US-10-027-632-236428 C 196 18 0.9 572 17 US-10-027-633-236428	192 18 0.9 560 17 US-10-424-599-57181 192 18 0.9 568 18 US-10-767-701-3681	189 18 0.9 552 17 US-10-027-632-194694	185 18 0.9 548 17 US-10-027-632-395893 187 18 0.9 550 9 US-09-918-686-12	184 18 0.9 548 13 US-10-027-632-95893 185 18 0.9 548 17 US-10-027-632-305915	C 182 18 0.9 531 13 US-10-027-632-267958 183 18 0.9 548 17 US-10-027-632-267958	C 180 18 0.9 514 16 US-10-029-386-6796 C 181 18 0.9 528 9 US-09-770-152-883	177 18 0.9 502 16 US-10-029-386-7398 178 18 0.9 502 18 US-10-029-386-7365 6 179 50 502 18 US-10-437-66 5-65	175 18 0.9 481 17 US-10-242-535A-17111 C 176 18 0.9 50 17 US-10-085-783A-17111	172 18 0.9 471 17 US-10-027-632-296512 173 18 0.9 471 17 US-10-242-535A-44034 18 0.9 471 17 US-10-085-783A-44034 174 18 0.9 471 17 US-10-085-783A-44034 18 0.9 471	C 170 18 0.9 471 13 US-10-027-632-29655 C 171 18 0.9 471 17 US-10-027-632-64569	C 169 16 0.9 463 10 US-10-085-783A-32320 C 169 0.9 471 13 US-10-027-632-64560	165 18 0.9 461 17 US-10-066-543-263-263-263-263-263-263-263-263-263-26	C 162 18 0.9 4.2 17 US-10-424-599-99262 C 163 18 0.9 4.2 17 US-10-424-599-10322 C 164 10 0.9 451 18 US-10-425-115-114-00	159 18 0.9 363 17 US-10-242-535A-2804 160 18 0.9 363 17 US-10-085-783A-2804 161 18 0.9 374 17 US-10-425-115-11954	158
230 18 0.9 757 13 US-10-027-632-24072	224 18 0.9 739 17 US-10-424-599-638109 224 18 0.9 748 13 US-10-027-632-151673 225 18 0.9 748 13 US-10-027-632-151673 226 18 0.9 752 13 US-10-027-632-9090 227 18 0.9 752 13 US-10-027-632-9090 228 18 0.9 752 17 US-10-027-632-9090 229 18 0.9 754 9 US-09-731-872-187	C 219 18 0.9 683 17 US-10-027-632-105295 C 220 18 0.9 683 17 US-10-027-632-105296 C 221 18 0.9 704 18 US-10-027-632-105297 222 18 0.9 704 18 US-10-425-115-5350	C 216 18 0.9 683 13 US-10-027-632-105295 C 217 18 0.9 683 13 US-10-027-632-105296 C 218 18 0.9 683 13 US-10-027-632-105297	213 18 0.9 682 13 US-10-027-632-215362 214 18 0.9 682 17 US-10-027-632-215362 215 18 0.9 683 13 US-10-027-632-215362	C 211 18 0.9 635 17 US-10-027-632-233772 C 212 18 0.9 663 18 US-10-357-930-21694	C 208 18 0.9 635 17 US-10-027-632-212320 C 209 18 0.9 635 17 US-10-027-632-233770 C 210 10 0.9 635 17 US-10-027-632-233770	C 205 18 0.9 635 13 US-10-027-632-233770 C 206 18 0.9 635 13 US-10-027-632-233772 207 18 0.9 635 13 US-10-027-632-233772	203 18 0.9 630 17 US-10-027-632-106700 203 18 0.9 635 13 US-10-027-632-212320 204 18 0.9 635 13 HTC 10-027-632-212320	C 200 18 0.9 605 9 US-09-731-872-189 C 201 18 0.9 610 13 US-09-876-997-189 C 201 18 0.9 610 13 US-10-027-6-397-189	197 18 0.9 5/4 1/ US-10-027-632-236429 198 18 0.9 588 16 US-10-029-386-2292 C 199 16 0.9 597 9 US-09-864-761-8350	C 194 18 0.9 572 13 US-10-27-632-236428 C 195 18 0.9 572 13 US-10-027-632-236428 C 196 18 0.9 572 17 US-10-027-633-236428	192 18 0.9 560 17 US-10-424-599-57181 192 18 0.9 568 18 US-10-767-701-3681	189 18 0.9 552 17 US-10-027-632-194694	185 18 0.9 548 17 US-10-027-632-395893 187 18 0.9 550 9 US-09-918-686-12	184 18 0.9 548 13 US-10-027-632-95893 185 18 0.9 548 17 US-10-027-632-305915	C 182 18 0.9 531 13 US-10-027-632-267958 183 18 0.9 548 17 US-10-027-632-267958	C 180 18 0.9 514 16 US-10-029-386-6796 C 181 18 0.9 528 9 US-09-770-152-883	177 18 0.9 502 16 US-10-029-386-7398 178 18 0.9 502 18 US-10-029-386-7365 6 179 50 502 18 US-10-437-66 5-65	175 18 0.9 481 17 US-10-242-535A-17111 C 176 18 0.9 50 17 US-10-085-783A-17111	172 18 0.9 471 17 US-10-027-632-296512 173 18 0.9 471 17 US-10-242-535A-44034 18 0.9 471 17 US-10-085-783A-44034 174 18 0.9 471 17 US-10-085-783A-44034 18 0.9 471	C 170 18 0.9 471 13 US-10-027-632-29655 C 171 18 0.9 471 17 US-10-027-632-64569	C 169 16 0.9 463 10 US-10-085-783A-32320 C 169 0.9 471 13 US-10-027-632-64560	165 18 0.9 461 17 US-10-066-543-263-263-263-263-263-263-263-263-263-26	C 162 18 0.9 4.2 17 US-10-424-599-99262 C 163 18 0.9 4.2 17 US-10-424-599-10322 C 164 10 0.9 451 18 US-10-425-115-114-00	159 18 0.9 363 17 US-10-242-535A-2804 160 18 0.9 363 17 US-10-085-783A-2804 161 18 0.9 374 17 US-10-425-115-11954	158
230 18 0.9 757 13 US-10-027-632-24072	224 18 0.9 739 17 US-10-424-599-638109 224 18 0.9 748 13 US-10-027-632-151673 225 18 0.9 748 13 US-10-027-632-151673 226 18 0.9 752 13 US-10-027-632-9090 227 18 0.9 752 13 US-10-027-632-9090 228 18 0.9 752 17 US-10-027-632-9090 229 18 0.9 754 9 US-09-731-872-187	C 219 18 0.9 683 17 US-10-027-632-105295 C 220 18 0.9 683 17 US-10-027-632-105296 C 221 18 0.9 704 18 US-10-027-632-105297 222 18 0.9 704 18 US-10-425-115-5350	C 216 18 0.9 683 13 US-10-027-632-105295 C 217 18 0.9 683 13 US-10-027-632-105296 C 218 18 0.9 683 13 US-10-027-632-105297	213 18 0.9 682 13 US-10-027-632-215362 214 18 0.9 682 17 US-10-027-632-215362 215 18 0.9 683 13 US-10-027-632-215362	C 211 18 0.9 635 17 US-10-027-632-233772 C 212 18 0.9 663 18 US-10-357-930-21694	C 208 18 0.9 635 17 US-10-027-632-212320 C 209 18 0.9 635 17 US-10-027-632-233770 C 210 10 0.9 635 17 US-10-027-632-233770	C 205 18 0.9 635 13 US-10-027-632-233770 C 206 18 0.9 635 13 US-10-027-632-233772 C 207 18 0.9 635 13 US-10-027-632-233772	203 18 0.9 630 17 US-10-027-632-106700 203 18 0.9 635 13 US-10-027-632-212320 204 18 0.9 635 13 HTC 10-027-632-212320	C 200 18 0.9 605 9 US-09-731-872-189 C 201 18 0.9 610 13 US-09-876-997-189 C 201 18 0.9 610 13 US-10-027-6-397-189	197 18 0.9 5/4 1/ US-10-027-632-236429 198 18 0.9 588 16 US-10-029-386-2292 C 199 16 0.9 597 9 US-09-864-761-8350	C 194 18 0.9 572 13 US-10-27-632-236428 C 195 18 0.9 572 13 US-10-027-632-236428 C 196 18 0.9 572 17 US-10-027-633-236428	192 18 0.9 560 17 US-10-424-599-57181 192 18 0.9 568 18 US-10-767-701-3681	189 18 0.9 552 17 US-10-027-632-194694	185 18 0.9 548 17 US-10-027-632-395893 187 18 0.9 550 9 US-09-918-686-12	184 18 0.9 548 13 US-10-027-632-95893 185 18 0.9 548 17 US-10-027-632-305915	C 182 18 0.9 531 13 US-10-027-632-267958 183 18 0.9 548 17 US-10-027-632-267958	C 180 18 0.9 514 16 US-10-029-386-6796 C 181 18 0.9 528 9 US-09-770-152-883	177 18 0.9 502 16 US-10-029-386-7398 178 18 0.9 502 18 US-10-029-386-7365 6 179 50 502 18 US-10-437-66 5-65	175 18 0.9 481 17 US-10-242-535A-17111 C 176 18 0.9 50 17 US-10-085-783A-17111	172 18 0.9 471 17 US-10-027-632-296512 173 18 0.9 471 17 US-10-242-535A-44034 18 0.9 471 17 US-10-085-783A-44034 174 18 0.9 471 17 US-10-085-783A-44034 18 0.9 471	C 170 18 0.9 471 13 US-10-027-632-29655 C 171 18 0.9 471 17 US-10-027-632-64569	C 169 16 0.9 463 10 US-10-085-783A-32320 C 169 0.9 471 13 US-10-027-632-64560	165 18 0.9 461 17 US-10-066-543-263-263-263-263-263-263-263-263-263-26	C 162 18 0.9 4.2 17 US-10-424-599-99262 C 163 18 0.9 4.2 17 US-10-424-599-10322 C 164 10 0.9 451 18 US-10-425-115-114-00	159 18 0.9 363 17 US-10-242-535A-2804 160 18 0.9 363 17 US-10-085-783A-2804 161 18 0.9 374 17 US-10-425-115-11954	158
230 18 0.9 757 13 US-10-027-632-24072	224 18 0.9 739 1 224 18 0.9 748 1 225 18 0.9 748 1 226 18 0.9 752 1 227 18 0.9 752 1 C 228 18 0.9 752 1 C 229 18 0.9 754 1	C 219 18 0.9 683 17 US-10-027-632-105295 C 220 18 0.9 683 17 US-10-027-632-105296 C 221 18 0.9 704 18 US-10-027-632-105297 222 18 0.9 704 18 US-10-425-115-5350	C 216 18 0.9 683 13 US-10-027-632-105295 C 217 18 0.9 683 13 US-10-027-632-105296 C 218 18 0.9 683 13 US-10-027-632-105297	213 18 0.9 682 13 US-10-027-632-215362 214 18 0.9 682 17 US-10-027-632-215362 215 18 0.9 683 13 US-10-027-632-215362	C 211 18 0.9 635 17 US-10-027-632-2337/2 C 212 18 0.9 663 18 US-10-357-930-21694	C 208 18 0.9 635 17 US-10-027-632-212320 C 209 18 0.9 635 17 US-10-027-632-233770 C 210 10 0.9 635 17 US-10-027-632-233770	C 205 18 0.9 635 13 US-10-027-632-233770 C 206 18 0.9 635 13 US-10-027-632-233772 C 207 18 0.9 635 13 US-10-027-632-233772	203 18 0.9 630 17 US-10-027-632-106700 203 18 0.9 635 13 US-10-027-632-212320 204 18 0.9 635 13 HTC 10-027-632-212320	C 200 18 0.9 605 9 US-09-731-872-189 C 201 18 0.9 610 13 US-09-876-997-189 C 201 18 0.9 610 13 US-10-027-6-397-189	197 18 0.9 5/4 1/ US-10-027-632-236429 198 18 0.9 588 16 US-10-029-386-2292 C 199 16 0.9 597 9 US-09-864-761-8350	C 194 18 0.9 572 13 US-10-27-632-236428 C 195 18 0.9 572 13 US-10-027-632-236428 C 196 18 0.9 572 17 US-10-027-633-236428	192 18 0.9 560 17 US-10-424-599-57181 192 18 0.9 568 18 US-10-767-701-3681	189 18 0.9 552 17 US-10-027-632-194694	185 18 0.9 548 17 US-10-027-632-395893 187 18 0.9 550 9 US-09-918-686-12	184 18 0.9 548 13 US-10-027-632-95893 185 18 0.9 548 17 US-10-027-632-305915	C 182 18 0.9 531 13 US-10-027-632-267958 183 18 0.9 548 17 US-10-027-632-267958	C 180 18 0.9 514 16 US-10-029-386-6796 C 181 18 0.9 528 9 US-09-770-152-883	177 18 0.9 502 16 US-10-029-386-7398 178 18 0.9 502 18 US-10-029-386-7365 6 179 50 502 18 US-10-437-66 5-65	175 18 0.9 481 17 US-10-242-535A-17111 C 176 18 0.9 50 17 US-10-085-783A-17111	172 18 0.9 471 17 US-10-027-632-296512 173 18 0.9 471 17 US-10-242-535A-44034 18 0.9 471 17 US-10-085-783A-44034 174 18 0.9 471 17 US-10-085-783A-44034 18 0.9 471	C 170 18 0.9 471 13 US-10-027-632-29655 C 171 18 0.9 471 17 US-10-027-632-64569	C 169 16 0.9 463 10 US-10-085-783A-32320 C 169 0.9 471 13 US-10-027-632-64560	165 18 0.9 461 17 US-10-066-543-263-263-263-263-263-263-263-263-263-26	C 162 18 0.9 4.2 17 US-10-424-599-99262 C 163 18 0.9 4.2 17 US-10-424-599-10322 C 164 10 0.9 451 18 US-10-425-115-114-00	159 18 0.9 363 17 US-10-242-535A-2804 160 18 0.9 363 17 US-10-085-783A-2804 161 18 0.9 374 17 US-10-425-115-11954	158

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		C 271 C 271 C 273 C 275 C 277 C 277 C 277 C 288 C 288			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
110000000000000000000000000000000000000	18 118 118 118 118 118 118 118 118 118	100 100 100 100 100 100 100 100 100 100	18 18 18 18 18 18		1 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1871 1871 1871 1871 1871 1871	1360 1637 1637 1681 1707 1810 1810 1871 1871 1871 1871	1077 1077 1117 1117 1118 1118 1118 1136 1238 1238 1263 1263 1360	976 976 1000 10014 1019 1050 1050 1052 1052	757 761 761 801 801 824 916 916 916
		18 13 17 15 11 11 11 17 10 10 13 13 13	17 17 13 13 17 17 13 17 17 17 17 18	19 13 17 17 17 17 17 17 17 17 17 17	17 13 17 13 17 17 17 17 17 13 13 13 13 17 17 17 17 17 17 17 17 17 17 17 17 17
US-10-063-513-91 US-10-063-515-91 US-10-063-512-91 US-10-173-706-301 US-10-175-738-301 US-10-175-752-301 US-10-176-782-301 US-10-176-787-301 US-10-176-913-301 US-10-180-552-301 US-10-180-557-301	US-10-174-590-301 US-10-176-758-301 US-10-175-737-301 US-10-063-618-91 US-10-176-481-301 US-10-176-483-301 US-10-176-749-301 US-10-176-914-301 US-10-176-915-301 US-10-176-915-301 US-10-176-915-301	US-10-398-038-30 US-10-027-632-262160 US-10-027-632-262160 US-10-128-714-1457 US-09-997-722-264 US-09-764-877-3847 US-09-764-877-3847 US-10-242-515-3847 US-10-242-515-3847 US-10-063-586-301 US-10-063-586-301 US-10-063-581-91 US-10-063-581-91	US-10-027-632-31252 US-10-027-632-31253 US-10-027-632-30638 US-10-027-632-30638 US-10-027-632-9076 US-10-027-632-9076 US-10-092-900A-301 US-09-876-889-266 US-10-288-252-30 US-10-369-493-47346 US-10-369-493-47346 US-10-388-252-30	US-10-03-04-1462 US-10-027-632-31702 US-10-027-632-31702 US-09-880-107-3462 US-10-282-122A-39698 US-10-062-674-1481 US-10-369-493-24463 US-10-282-122A-6892 US-09-764-847-1563 US-10-027-632-31252 US-10-027-632-31253	17 US-10-027-632-24072 13 US-10-027-632-14676 17 US-10-027-632-131523 18 US-10-027-632-131523 17 US-10-424-599-10691 18 US-10-027-632-15341 18 US-10-027-632-15343 18 US-10-027-632-15343 18 US-10-027-632-15343 19 US-10-027-632-15343
	91,	300, 3847 3847 201, 3847 3847 217 217	31252, 31253, 31253, 30638, 9076, A 9076, A	31702 31702 31702 3162, # 39698, 1481, 24463, 1563, # 1563, # 1563, # 1563, # 1563, # 1563, # 1563, #	
					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	188888888888888888888888888888888888888	11888888888888888888888888888888888888	188 1188 1188 1188 1188 1188 1188 1188		
1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1877 1877 1877 1877 1877 1877	1871 1871 1871 1871 1871 1871 1871 1877 1877 1877 1877 1877 1877	1871 1872 1873 1873 1873 1873 1873 1873 1871 1871
1111111111111	, 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4				
10-176-760-10-176-790-10-176-790-10-180-541-10-180-541-10-180-551-10-180-998-180-998-10-180-998-10-180-998-10-180-998-10-180-998-10-180-998-10-	-10-184-647-10-184-652-2-10-187-594-2-10-187-745-2-10-187-885-2-10-187-886-2-10-187-886-2-10-196-756-2-10-196-756-2-10-176-751-2-10-176-751-2-10-187-886-2-10-196-756-2-10-196-756-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-187-886-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-187-886-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-196-7551-2-10-187-886-2-10-187-888-2-10-187-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-2-188-888-8	-10-180-547 -10-180-549 -10-180-555 -10-180-555 -10-181-009 -10-183-010 -10-183-010 -10-183-011 -10-184-614 -10-184-635 -10-184-635 -10-184-635	10-176-485 -10-176-483 -10-176-493 -10-176-756 -10-176-919 -10-176-925 -10-176-925 -10-179-510 -10-180-543 -10-180-544	-10-176-992- -10-176-993- -10-184-658- -10-184-658- -10-163-549- -10-173-695- -10-173-695- -10-173-695- -10-174-576- -10-174-585- -10-174-586- -10-175-747-	
			Sequence		Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

0.0000000000000000000000000000000000000	C 575 C 576 C 577 C 577 C 578 C 579 C 580 C 581 C 582	0 564 0 565 0 566 0 566 0 568 0 6570 0 6571 0 6572 0 573	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	c 523 c 524 c 525
112888888888888888888888888888888888888	111111111111 1000000000	11888			18 18 18
	· · · · · · · · · · ·				0.9
1871 1871 1871 1871 1877 1877 1877 1877	1871 1871 1871 1871 1877 1877 1877 1877	1871 1871 1877 1877 1877 1877 1877 1877	1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1871
444444444444444444444444444444444444444	<b>.44444</b> .444.				14 14
-10-013-907A-2 -10-015-499A-2 -10-063-555-91 -10-196-757-30 -10-196-754-30 -10-174-571-30 -10-176-746-30 -10-176-923-30 -10-183-011-30	10-201-329-30 -10-202-412-30 -10-206-919-30 -10-206-922-30 -10-206-924-30 -10-206-928-30 -10-207-914-30 -10-207-913-30 -10-207-913-30 -10-207-922-30	10-195-884 -10-195-884 -10-196-744 -10-196-755- -10-197-710 -10-198-758 -10-198-758 -10-199-304 -10-199-309 -10-199-309	-10-290-617-300 -10-200-617-300 -10-205-897-300 -10-063-563-91 -10-063-563-91 -10-195-896-30 -10-180-550-30 -10-183-014-30 -10-187-738-30 -10-187-883-30 -10-187-883-30 -10-187-883-30 -10-187-883-30 -10-194-460-30	US-10-199-318-301 US-10-199-458-301 US-10-199-458-301 US-10-201-328-301 US-10-201-528-301 US-10-201-528-301 US-10-201-528-301 US-10-201-528-301 US-10-201-529-301 US-10-202-408-301 US-10-202-408-301 US-10-202-411-301 US-10-202-472-301 US-10-202-472-301 US-10-202-472-301 US-10-202-502-301 US-10-203-502-301 US-10-103-502-301 US-10-103-502-301 US-10-103-502-301 US-10-103-502-301 US-10-103-503-301 US-10-104-58-301 US-10-104-58-301 US-10-196-758-301 US-10-196-758-301	-10-197-697-: -10-197-707-: -10-199-303-:
ice 217 ice 91, ice 91, ice 301	100 3011000 3011000 3011000 301100 3011000 3011000 3011000 30110000 3011000 3011000 3011000 30	100 301	Sequence 301,		equence 301 equence 301 equence 301
\$\\ \text{\$\frac{1}{2} \text{\$\frac{1} \text{\$\frac{1}{2} \text{\$\frac{1} \text{\$\frac{1}{2} \text{\$\frac{1}{2} \text{\$\frac{1}	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$\$\$\$\$\$\$\$\$\$\$\$\$\$	200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	gg, gg, gg,
				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	118 118 118 118 118 118	1288 128 128 128 128 128 128 128 128 128			
					18 18
		<b></b>			000
				•••••••••	000
.9 1871 .9 1871	9 1871 9 1871 9 1871 9 1871 9 1871 1 1871 9 1871 9 1871 9 1871 9 1871 1 1871 1 1871			0.9 1871 1 0.9 1871 1	0.9 1871 1 0.9 1871 1 0.9 1871 1
9 1871 14 US-10- 9 1871 14 US-10-	9 1871 14 US-10- 9 1871 14 US-10-	.9 1871 14 US-10- .9 1871 14 US-10-	0.9 1871 14 US-10-	0.9 1871 14 US-1	0.9 1871 14 US-10- 0.9 1871 14 US-10- 0.9 1871 14 US-10-

	•											0 0	റററ										0.0						
	. 000000	0 0 0 0	000	000	0 0 0	0 0 0	0 0	ດດ	000	0 0	(3 ()			000	200	0.0	00/						00						
	39		730 731 732	728	726	723 724 725	721 722	719	717	714 715 716	712 713	710 711	707 708 709	705	702	700	699	696	0 693	c 69	C 69	G 68	68	89 0 0 0	0.68 0.09	0 G	0.0	900	9 9
	18	18	18 18	18 18	18	18 18	18 18	18	18 18	18	18	18	18 18	18 18	18	18	18	18	31	16	==	브브	ب ب	<b>-</b> ,		2 2			
10   10   10   10   10   10   10   10	000000	0000	000																										
1																													
1	1871 1871 1871 1871 1871 1871 1871	1871 1871 1871 1871 1871	1871 1871 1871	1871 1871	1871 1871	1871	1871	187	187	187	187	187 187	187	181	18	18.	18	18	18	18	- 11	1	<u> </u>		, بر د	,			
1	14 14 14 14 14	14	14	14	. 14	14	12.			22, 22,	11 <sub>1</sub>	تر تر نہ بر دم ہ	111	777	71	222	71	71	71	971	371	871	871	871	871	871	871	871 871	871
Comparison	SO S	SS		ជ្ជជ	ទូទូ	555	====				4 4 4 7 C	44	444	عبد، -	42.44	14	14	14	14	14	14	114	14	14	14	14	14	14	14 14
Sequence 301, App	10-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	10-10-1	-10-	-10-	-10-	-10-	10-10-	3-10-	6-10	S-10 S-10	S-10 S-10	S-10 S-10	S-10	78-10 78-10	78-10 78-10	78-10	US-1	US-1 US-1	ns-1	US-1	US-1	US-1	US-1	us-	-80	US-	5 S	-80	-80
Sequence 301, App	202-9 205-9 205-9 111-6 112-7 115-3	013-4 174-5 179-5 201-3	007- 197-	176-	125- 176-	013- 063-	183-	-006	-063	-201	-205 -175	-208 -012	-206 -207 -207	205	)-195 )-195	0-194	0-18	0-17 0-17	0-17 0-17	0-01	0-23	0-01	10-20	10-20	10-2	10-2	10-2	10-2	10-2
Sequence 301, App	941-3 910-3 910-3 955A- 86A-	430A- 575A- 520-3	194A 691-: 771-:	979-	923A 491-	696- 913A	016-	-117# -527#	-599-	-327	-904 -753	-028 -121	-917 -923 -924	-891	-302	1-360	4-64:	5-74	3-69	5-86	5-89	3-56	03-02	02-80	08-0	07-9	07-9	07-9	06-9
Sequence 301, App	01 01 217 217 217	-217 -301 301	-217 301 301	301	-301	301 -217	301	-217	-91 -217	301	-301 -301	-301 A-21	-301 -301 -301	-301	301	301	301	0-30	3-30	9-30 9A-2	8-30	3A-2	29-3C	23-3( 26-3(	21-3( 22-3(	25-3	19-3	17-3	26-3 27-3
Sequence 301, App								•				7					r- <i>r</i> F			1 17	1 1	17	ΞΞ	<b>44</b>	22	22	.22	222	222
App																													
App	Seque Seque Seque Seque Seque	sequ Seques Seques	Seque Seque	Sequ	Sequ	Seq	Seq	Seq	s e q	Seg	0.09.5 0.09.5 0.09.5	0 0 0 0 0 0 0 0 0	988		0 Q	ა ი ი		8 8	ဗ္ဗ	က္ကလူ	က္က	ကြွယ္လ	ကြောက	ກເກເ	o (o (	ຄາຄ	<b>50 50</b>	50. fo	/o ro .
App	ence ence ence ence ence	ence	ence	ence	ence	ence	rence	renci renci	nenc	nenc	ouen ouend	nenc	nenc	rear Juent	quen	quen quen	dren	quen	quen	duer	andre	eque	edre	eque eque	eque	eque	eque	eque	eque eque
App	301 301 301 217 217 217,	217 301 301	301	301	91,	217	301	e 21	e 30	e 30	e 6 20 20 20	ie 30	300	36 30	ce 3	င္က မ မ မ မ မ မ မ မ မ မ မ မ မ မ မ မ မ မ မ	26 3 26 3	2 a 3	7 95 17 18 18 18 18 18 18 18 18 18 18 18 18 18	200	3 2 2	900	900	nce	nce	nce	псе	nce	e proce
App App C 745 App C 745 App C 745 App C 746 App C 747 App C 747 App C 748 App C 749 Ap	22222	2222	יי. מוצלים	 > >	, A	 	 	י, יי, יי אי אי א	, , , ,	11 11 11 11 11 11 11 11 11 11 11 11 11		בֿן בֿן נ	FF	1,12	21,	200	200	225	2,2,5	101,	201,	217,	301,	301,	301,	301	301	301	301,
C 744 18 0.9 1871 15 US-10-773-701-301 Sequence control of 745 18 0.9 1871 15 US-10-773-701-301 Sequence control of 745 18 0.9 1871 15 US-10-773-701-301 Sequence control of 745 18 0.9 1871 15 US-10-10-20-301 Sequence control of 745 18 0.9 1871 15 US-10-10-20-301 Sequence control of 745 18 0.9 1871 15 US-10-20-301 Sequence contro	999999	2222	0 0 0	יסיסי	י לי לי	יסיסי	7 77 7	4 15 15	~~		P P P	<b>* &amp; &amp;</b>	29 29 3					ר עב עב											
744 18 0.9 1871 15 US-10-73-701-301 Sequence 745 18 0.9 1871 15 US-10-73-513-301 Sequence 746 18 0.9 1871 15 US-10-189-518-301 Sequence 747 18 0.9 1871 15 US-10-189-624-301 Sequence 747 18 0.9 1871 15 US-10-189-67-301 Sequence 748 18 0.9 1871 15 US-10-199-761-301 Sequence 749 18 0.9 1871 15 US-10-20-40-301 Sequence 750 18 0.9 1871 15 US-10-20-69-301 Sequence 750 18 0.9 1871 15 US-10-20-59-301 Sequence 750 18 0.9 1871 15 US-10-20-59-301 Sequence 750 18 0.9 1871 15 US-10-20-59-301 Sequence 750 18 0.9 1871 15 US-10-20-69-301 Sequence 750 18 0.9 1871 15 US-10-20-69-302 19 Sequence 750 18 0.9 1871 15 US-10-10-69-302 19 Sequence 750 18 0.9 1871 15 US-10-10-302 19 Sequence 750 18 0.9 1871 16 US-10-10-302 19 Sequence 750 18 0.9 18 0.9 18 0.9 18	9,9,9,9,9,9,	8888	<u>مُرْمَ</u> مُرِيدًا مِنْ	<b>đ</b> đ	rg gg	9 9 9	g g g	gg gg	ğg	ָּלֵי לֵי לֵי ס' ס' ס'	App App	App	App App	g g	ָלֵי לֵי לֵּל	g g	dd dd	ָלֵי לֵי לֵּלְי ס' ס' ס	d d d	App	App	App	App	App	App	App	App	App	App
18		\$ \$ \$ \$	dđ	dđ	ַ מַּמְּאַ מַמְּאַ בֿמָנ	dd dd		dd.	p D D D D D D D D D D D D D D D D D D D	ָּלָי פֿלי קילי פֿלי קילי פּלי	agg Agg Agg	App App	App App App	4 d d	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		ਰੰਕ	ָם מַּלָּקּי	ddy ddy	App	App	App App	App	App	App	App	App	App App	App App
18	999999			יסיסי	т Т	ילי לי לי		~~~~	2.9	9.00		dd	QQ	444		<del>-</del>				-	App	App	App	App	App	App	App	App	App App
0.9 1871 15 US-10-173-701-301 Sequence 0.9 1871 15 US-10-179-511-301 Sequence 0.9 1871 15 US-10-184-527-301 Sequence 0.9 1871 15 US-10-184-527-301 Sequence 0.9 1871 15 US-10-184-527-301 Sequence 0.9 1871 15 US-10-205-307-301 Sequence 0.9 1871 15 US-10-205-308-301 Sequence 0.9 1871 15 US-10-205-308-21 Sequence 0.9 1871 16 US-10-179-301 Sequence 0.9 1871 16 US-10-1	C C C C C C C C C C C C C C C C C C C	C C C C C C C C C C C C C C C C C C C	c 801 c 802 c 803	c 799	C 797	C 794	c 792	c 790 c 791	2.9	9.00		dd	QQ	444		<del>-</del>				-	App	App	App	App	App	App	App	App	App App
9 1871 15 US-10-173-701-301 Sequence 9 1871 15 US-10-179-511-301 Sequence 9 1871 15 US-10-189-618-301 Sequence 9 1871 15 US-10-184-624-301 Sequence 1871 15 US-10-197-706-301 Sequence 9 1871 15 US-10-202-940-301 Sequence 1871 15 US-10-202-940-301 Sequence 1871 15 US-10-202-940-301 Sequence 1871 15 US-10-203-903-301 Sequence 1871 15 US-10-203-903-301 Sequence 1871 15 US-10-203-933-301 Sequence 1871 15 US-10-203-933-301 Sequence 1871 15 US-10-203-931-301 Sequence 1871 15 US-10-203-932-31 Sequence 1871 15 US-10-203-932-31 Sequence 1871 15 US-10-203-932-31 Sequence 1871 15 US-10-203-933-301 Sequence 30 US-10-173-693-301 Sequence 30 Sequence 30 US-10-173-693-301 Sequence 30 US-10-173-693-301 Sequence 30	C C C C C C C C C C C C C C C C C C C	C C C C C C C C C C C C C C C C C C C	c 802 c 803	c 799	C 796	C 794	c 793	c 790 c 791	c 789	c 785	pp c 783 pp c 784	pp c 781 c 782	100 C 778	6 776 6 777	C 773	c 771 c 772	c 769 c 770	c 766 c 767	c 764 c 765	c 762 c 763	App c 760	App c 758 App c 759	App c 756	App c 754 App c 755	App c 752 App c 753	App c 750	App c 748	App c 747	App c 744 App c 745
1871 15 US-10-173-701-301 Sequence 1871 15 US-10-179-518-301 Sequence 1871 15 US-10-183-018-301 Sequence 1871 15 US-10-184-624-301 Sequence 1871 15 US-10-184-627-301 Sequence 1871 15 US-10-184-627-301 Sequence 1871 15 US-10-197-705-301 Sequence 1871 15 US-10-201-87-7301 Sequence 1871 15 US-10-201-87-7301 Sequence 1871 15 US-10-202-938-301 Sequence 1871 15 US-10-202-938-301 Sequence 1871 15 US-10-202-938-301 Sequence 1871 15 US-10-203-938-301 Sequence 1871 15 US-10-203-938-301 Sequence 1871 15 US-10-203-557-91 Sequence 1871 15 US-10-203-597-301 Sequence 1871 15 US-10-203-735-91 Sequence 203-203-203-203-203-203-203-203-203-203-	C 800 18 C 809 18 C 810 18 C 811 18 C 811 18	C 804 18 C 805 18 C 806 18	c 801 18 c 802 18	C 799 18	1 c 796 18 c 797 18 c 790 18	c 794 18	C 792 18 C 793 18	c 790 18 c 791 18	C 788 18 C 789 18	07 C 785 18 C 786 18	pp c 783 18 c 784 18	pp c 781 18 pp c 782 18	τρο c 778 18 18 18 18 18 18 18 18 18 18 18 18 18	φρ c 776 18 c 777 18	c 773 18 c 774 18	c 771 18 c 772 18	c 769 18 c 770 18	C 766 18 C 767 18	c 764 18 c 765 18	c 762 18 c 763 18	18 C 760 18 App C 761 18	App c 758 18 App c 759 18	App c 756 18 App c 757 18	App c 754 18 App c 755 18	App c 752 18 App c 753 18	App c 750 18	App C 748 18	App C 746 18	App c 744 18 App c 745 18
15 US-10-173-701-301 Sequence 15 US-10-179-511-301 Sequence 15 US-10-183-018-301 Sequence 15 US-10-184-624-301 Sequence 15 US-10-184-624-301 Sequence 15 US-10-184-627-301 Sequence 15 US-10-201-857-301 Sequence 15 US-10-202-940-301 Sequence 15 US-10-202-940-301 Sequence 15 US-10-202-930-301 Sequence 15 US-10-208-025-300 15 US-10-208-025-301 Sequence 15 US-10-063-587-91 Sequence 15 US-10-018-603-301 Sequence 15 US-10-184-613-301 Sequence 15 US-10-194-672-301 Sequence 16 US-10-173-698-301 Sequence 17 US-10-173-698-301 Sequence 18 US-10-173-698-301 Sequence 19 US-10-173-698-301 Sequence 20 US-10-173-698	C 811 18 0.9 C 812 18 0.9 C 813 18 0.9 C 811 18 0.9 C 811 18 0.9	C 805 18 0.9 C 807 18 0.0 C 807	C 802 18 0.9 C 803 18 0.9	C 798 18 0.9 C 800 18 0.9	C 796 18 0.9 C 790 18 0.9 C 790 18 0.9	C 794 18 0.9	C 792 18 0.9 C 793 18 0.9	C 790 18 0.9	5) C 789 18 0.9 C 789 18 0.9	C 785 18 0.9	pp c 783 18 0.9	pp	で	φρ c 7/5 18 0.9 φρ c 7/7 18 0.9 φρ c 777 18 0.9	C 773 18 0.9 C 774 18 0.9	c 771 18 0.9 c 772 18 0.9	c 769 18 0.9 c 7769 18 0.9	C 766 18 0.9	c 764 18 0.9 c 765 18 0.9	C 762 18 0 9	App c 760 18 0.5	App c 758 18 0:5	App c 756 18 0.3	App c 754 18 0.	App c 752 18 0. App c 753 18 0.	C 750 18 0.	C 748 18 0.	App C 746 18 0.	App c 744 18 0.
US-10-173-701-301  US-10-179-518-301  US-10-179-518-301  Sequence US-10-184-657-301  Sequence US-10-197-701-301  Sequence US-10-197-701-301  Sequence US-10-197-706-301  Sequence US-10-202-940-301  Sequence US-10-202-940-301  Sequence US-10-206-918-301  US-10-206-918-301  US-10-063-557-91  US-10-063-557-91  US-10-063-557-91  US-10-063-588-91  US-10-198-760-301  US-10-198-761-301  US-10-198-781-301  US-10-198-7	C 807 18 0.9 1871 C 808 18 0.9 1871 C 809 18 0.9 1871 C 810 18 0.9 1871 C 811 18 0.9 1871 C 812 18 0.9 1871	C 804 18 0.9 1871 C 805 18 0.9 1871 C 806 18 0.9 1871 C 807 18 0.9 1871	C 801 18 0.9 1871 C 802 18 0.9 1871 C 803 18 0.9 1871	C 798 18 0.9 1871 C 800 18 0.9 1871 C 800 18 0.9 1871	1 C 796 18 0.9 1871 C 790 18 0.9 1871	C 794 18 0.9 1871	C 792 18 0.9 1871	20 C 790 18 0.9 1871 20 C 791 18 0.9 1871	5 76 18 0.9 1871 5 1 0.9 1871 5 1 0.9 1871 5 1 0.9 1871	C 785 18 0.9 1877	pp c 783 18 0.9 187.	pp c 781 18 0.9 187 pp c 782 18 0.9 187	DD C 770 18 0.9 187 DD C 770 18 0.9 187	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	C 773 18 0.9 187 C 774 18 0.9 187	C 771 18 0.9 187 C 772 18 0.9 187	c 769 18 0.9 18 c 770 18 0.9 18	C 766 18 0.9 18 C 767 18 0.9 18	C 764 18 0.9 18 C 765 18 0.9 18	C 762 18 0.9 18 C 763 18 0.0 10	1001 C 760 18 0.9 18	App c 758 18 0.9 18	App c 756 18 0.9 18 App c 757 18 0.0 18	App c 754 18 0.9 18 App c 755 18 0.9 18	App c 752 18 0.9 10 App c 753 18 0.9 10	C 750 18 0.9 11 C 751 18 0.9 11	App C 748 18 0.9 1	App C 746 18 0.9 1	App c 744 18 0.9 1
10-173-701-301 Sequence 10-13-511-301 Sequence 10-18-3018-301 Sequence 10-18-467-301 Sequence 10-18-67-301 Sequence 10-19-18-67-301 Sequence 10-201-18-57-301 Sequence 10-202-913-301 Sequence 10-202-913-301 Sequence 10-202-913-301 Sequence 10-202-913-301 Sequence 10-203-580-91 Sequence 10-203-580-91 Sequence 10-204-603-85-91 Sequence 10-205-905-905-905-905-905-905-905-905-905-9	C 800 18 0.9 1871 16 C 800 18 0.9 1871 16 C 809 18 0.9 1871 16 C 811 18 0.9 1871 16 C 811 18 0.9 1871 16 C 811 18 0.9 1871 16	C 804 18 0.9 1871 16 C 805 18 0.9 1871 16 C 807 18 0.9 1871 16 C 807 18 0.9 1871 16	C 803 18 0.9 1871 16 C 803 18 0.9 1871 18 0.9 18	C 798 18 0.9 1871 16 C 799 18 0.9 1871 16 C 800 18 0.9 1871 16	1 C 795 18 0.9 1871 16 C 797 18 0.9 1871 16 C 790 18 0.9 1871 16	C 794 18 0.9 1871 16 18 18 18 18 18 18 18 18 18 18 18 18 18	C 792 18 0.9 1871 16 C 793 18 0.9 1871 16	C 790 18 0.9 1871 16 0.9 1871 16 0.9 1871 16	DD C 786 18 0.9 1871 16	OP C 785 18 0.9 1871 10 OP C 786 18 0.9 18 0.9 1871 10 OP C 786 18 0.9 1871 10 OP C 786 18 0.9	pp c 783 18 0.9 1871 10 pp c 784 18 0.9 18 18 18 18 18 18 18 18 18 18 18 18 18	pp c 782 18 0.9 1871 1 pp c 782 18 0.9 1871 1	DD     C 778     18     0.9     1871       DD     C 779     18     0.9     1871     1	φρ c 7/6 18 0.9 1871 1 φρ c 7/6 18 0.9 1871 1 φρ c 777 18 0.9 1871 1	C 773 18 0.9 1871 1 C 774 18 0.9 1871 1	C 771 18 0.9 1871 1 C 772 18 0.9 1871 1	C 770 18 0.9 1871	C 766 18 0.9 1871 C 767 18 0.9 1871	C 764 18 0.9 1871 C 765 18 0.9 1871	C 762 18 0.9 1871 C 763 18 0.9 1871	1901 c 760 18 0.9 1871 1800 c 761 18 0 0 1871	App c 758 18 0.9 1871	App c 756 18 0.9 1871	App c 754 18 0.9 1871 App c 755 18 0.9 1871	App c 752 18 0.9 1871 App c 753 18 0.9 1871	C 750 18 0.9 1871	App c 748 18 0.9 1871	App C 746 18 0.9 1871 App C 747 18 0.9 1871	App c 744 18 0.9 1871
Sequence seq	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 C 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	00 C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	150 C 760 18 0.9 1871 15 15 15 15 15 15 15 15 15 15 15 15 15	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence Seq	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US C 813 19 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 C 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	150 C 760 18 0.9 1871 15 15 15 15 15 15 15 15 15 15 15 15 15	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence Seq	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US C 813 18 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 c 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	150 C 760 18 0.9 1871 15 15 15 15 15 15 15 15 15 15 15 15 15	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence seq	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US C 813 18 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 c 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	150 C 760 18 0.9 1871 15 15 15 15 15 15 15 15 15 15 15 15 15	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence Seq	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US C 813 18 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 c 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	1901 C 760 18 0.9 1871 15 1800 1871 15 1800 1871 15 1800 1871 15 1800 1871 15 1800 1871 1800 1870 187	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence 301, App Sequence 301	C 807 18 0.9 1871 16 US C 808 18 0.9 1871 16 US C 809 18 0.9 1871 16 US C 810 18 0.9 1871 16 US C 811 18 0.9 1871 16 US C 812 18 0.9 1871 16 US C 813 18 0.9 1871 16 US	C 804 18 0.9 1871 16 US C 805 18 0.9 1871 16 US C 806 18 0.9 1871 16 US C 807 10 0.9 1871 16 US	C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US C 803 18 0.9 1871 16 US	C 799 18 0.9 1871 16 U	1 c 796 18 0.9 1871 16 U	C 794 18 0.9 1871 16 U	C 792 18 0.9 1871 16 17	C 790 18 0.9 1871 16 U	50 C 789 18 0.9 1871 16 t	C 785 18 0.9 1871 16 U	pp c 783 18 0.9 1871 16 1 c 784 18 0.9 1871 16 1	pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp c 782 18 0.9 1871 15 pp	DD C 780 18 0.9 1871 15 DD C 780 18 0.9 1871 15	φρ c 7/6 18 0.9 1871 15 φρ c 7/7 18 0.9 1871 15 φρ c 777 18 0.9 1871 15	C 773 18 0.9 1871 15 C 774 18 0.9 1871 15	C 771 18 0.9 1871 15 C 772 18 0.9 1871 15	C 769 18 0.9 1871 15 C 769 18 0.9 1871 15 C 770 18 0.9 1871 15	C 766 18 0.9 1871 15 C 767 18 0.9 1871 15	C 764 18 0.9 1871 15 C 765 18 0.9 1871 15	C 762 18 0.9 1871 15 C 763 18 0.9 1871 15	1901 C 760 18 0.9 1871 15 1800 1871 15 1800 1871 15 1800 1871 15 1800 1871 15 1800 1871 1800 1870 187	App c 758 18 0.9 1871 15 App c 759 18 0.9 1871 15	App c 756 18 0.9 1871 15 App c 757 18 0.9 1871 15	App c 754 18 0.9 1871 15 App c 755 18 0.9 1871 15	App c 752 18 0.9 1871 15 App c 753 18 0.9 1871 15	C 750 18 0.9 1871 15	App c 748 18 0.9 1871 15	App C 746 18 0.9 1871 15 App C 747 18 0.9 1871 15	App c 744 18 0.9 1871 15 App c 745 18 0.9 1871 15 App c 745 18 0.9 1871 15
Sequence 301, App Sequence 301	C 807 18 0.9 1871 16 US-10-175-754-301 C 808 18 0.9 1871 16 US-10-176-480-301 C 809 18 0.9 1871 16 US-10-176-489-301 C 810 18 0.9 1871 16 US-10-176-489-301 C 811 18 0.9 1871 16 US-10-176-754-301 C 812 18 0.9 1871 16 US-10-176-754-301 C 813 18 0.9 1871 16 US-10-176-755-301	C 804 18 0.9 1871 16 US-10-175-744-301 C 805 18 0.9 1871 16 US-10-175-745-301 C 806 18 0.9 1871 16 US-10-175-745-301 C 807 18 0.9 1871 16 US-10-175-751-301	C 801 18 0.9 1871 16 US-10-174-591-301 C 802 18 0.9 1871 16 US-0-175-736-301 C 803 18 0 0 1071 16 US-10-175-742-301	D C 799 18 0.9 1871 16 US-10-174-587-301 D C 800 18 0.9 1871 16 US-10-174-589-301	1 C 795 18 0.9 1871 16 US-10-174-569-301 p C 790 18 0.9 1871 16 US-10-174-583-301	C 794 18 0.9 1871 16 US-10-173-698-301 C 795 18 0.9 1871 16 US-10-173-699-301 C 795 18 0.9 1871 16 US-10-173-707-301	C 792 18 0.9 1871 16 US-10-173-691-301 C 793 18 0.9 1871 16 US-10-173-694-301	20 C 790 18 0.9 1871 16 US-10-173-689-301 18 0.9 1871 16 US-10-173-690-301 18 0.9 1871 16 US-10-173-690-301	25	C 785 18 0.9 1871 16 US-10-184-647-301	pp c 783 18 0.9 1871 15 US-10-199-672-301 pp c 784 18 0.9 1871 16 US-10-006-172A-217	pp c 781 18 0.9 1871 15 US-10-063-735-91 pp c 782 18 0 1871 15 US-10-066-130A-217	PP     C 778     18     0.9     1871     15     US-10-006-041A-217       PP     C 779     18     0.9     1871     15     US-10-015-822A-217       PP     C 780     10     0.9     1871     15     US-10-015-387A-217	φρ c 7/6 18 0.9 1871 15 US-10-011-833/8-21/ μρ c 776 18 0.9 1871 15 US-10-063-588-91	C 773 18 0.9 1871 15 US-10-183-009-301 C 774 18 0.9 1871 15 US-10-017-4073-311 C 774 18 0.9 1871 15 US-10-017-4073-31	C 771 18 0.9 1871 15 US-10-206-907-301 C 772 18 0.9 1871 15 US-10-015-391A-217	C 769 18 0.9 1871 15 US-10-184-613-301 C 770 18 0.9 1871 15 US-10-187-739-301	C 766 18 0.9 1871 15 US-10-006-063A-217 C 767 18 0.9 1871 15 US-10-063-585-91 C 767 18 0.9 1871 15 US-10-070-73-73	c 764 18 0.9 1871 15 US-10-198-760-301 c 765 18 0.9 1871 15 US-10-201-772-301	c 762 18 0.9 1871 15 US-10-006-768A-217 c 763 18 0 0 1871 15 US-10-017-610A-217	1991 c 760 18 0.9 18/1 15 US-10-011-692A-217 18 0.9 1871 15 US-10-063-557-91	App c 758 18 0.9 1871 15 US-10-208-025-301 App c 759 18 0.9 1871 15 US-10-063-580-91	App c 756 18 0.9 1871 15 US-10-205-905-301 App c 757 18 0.9 1871 15 US-10-206-918-301	App c 754 18 0.9 1871 15 US-10-202-940-301 App c 755 18 0.9 1871 15 US-10-205-508-301	App c 752 18 0.9 1871 15 US-10-202-413-301 App c 753 18 0.9 1871 15 US-10-202-938-301	App c 750 18 0.9 1871 15 US-10-197-706-301 App c 751 18 0.9 1871 15 US-10-201-857-301	App C 748 18 0.9 1871 15 US-10-184-657-301 App C 749 18 0.9 1871 15 US-10-197-701-301	App c 746 18 0.9 1871 15 US-10-184-624-301 App c 747 18 0.9 1871 15 US-10-184-624-301	App c 744 18 0.9 1871 15 US-10-179-511-301 App c 745 18 0.9 1871 15 US-10-179-518-301
lence 301, Applence 301, Apple	C 807 18 0.9 1871 16 US-10-175-754-301 C 808 18 0.9 1871 16 US-10-176-480-301 C 809 18 0.9 1871 16 US-10-176-489-301 C 810 18 0.9 1871 16 US-10-176-489-301 C 811 18 0.9 1871 16 US-10-176-754-301 C 812 18 0.9 1871 16 US-10-176-754-301 C 813 18 0.9 1871 16 US-10-176-759-301	C 804 18 0.9 1871 16 US-10-175-744-301 C 805 18 0.9 1871 16 US-10-175-745-301 C 806 18 0.9 1871 16 US-10-175-745-301 C 807 18 0.9 1871 16 US-10-175-751-301	C 801 18 0.9 1871 16 US-10-174-591-301 C 802 18 0.9 1871 16 US-0-175-736-301 C 803 18 0 0 1071 16 US-10-175-742-301	D C 799 18 0.9 1871 16 US-10-174-587-301 D C 800 18 0.9 1871 16 US-10-174-589-301	1 C 795 18 0.9 1871 16 US-10-174-569-301 p C 790 18 0.9 1871 16 US-10-174-583-301	C 794 18 0.9 1871 16 US-10-173-698-301 C 795 18 0.9 1871 16 US-10-173-699-301 C 795 18 0.9 1871 16 US-10-173-707-301	C 792 18 0.9 1871 16 US-10-173-691-301 C 793 18 0.9 1871 16 US-10-173-694-301	20 C 790 18 0.9 1871 16 US-10-173-689-301 18 0.9 1871 16 US-10-173-690-301 18 0.9 1871 16 US-10-173-690-301	25	C 785 18 0.9 1871 16 US-10-184-647-301	pp c 783 18 0.9 1871 15 US-10-199-672-301 pp c 784 18 0.9 1871 16 US-10-006-172A-217	pp c 781 18 0.9 1871 15 US-10-063-735-91 pp c 782 18 0 1871 15 US-10-066-130A-217	PP     C 778     18     0.9     1871     15     US-10-006-041A-217       PP     C 779     18     0.9     1871     15     US-10-015-822A-217       PP     C 780     10     0.9     1871     15     US-10-015-387A-217	φρ c 7/6 18 0.9 1871 15 US-10-011-833/8-21/ μρ c 776 18 0.9 1871 15 US-10-063-588-91	C 773 18 0.9 1871 15 US-10-183-009-301 C 774 18 0.9 1871 15 US-10-017-4073-311 C 774 18 0.9 1871 15 US-10-017-4073-31	C 771 18 0.9 1871 15 US-10-206-907-301 C 772 18 0.9 1871 15 US-10-015-391A-217	C 769 18 0.9 1871 15 US-10-184-613-301 C 770 18 0.9 1871 15 US-10-187-739-301	C 766 18 0.9 1871 15 US-10-006-063A-217 C 767 18 0.9 1871 15 US-10-063-585-91 C 767 18 0.9 1871 15 US-10-070-73-73	c 764 18 0.9 1871 15 US-10-198-760-301 c 765 18 0.9 1871 15 US-10-201-772-301	c 762 18 0.9 1871 15 US-10-006-768A-217 c 763 18 0 0 1871 15 US-10-017-610A-217	1991 c 760 18 0.9 18/1 15 US-10-011-692A-217 18 0.9 1871 15 US-10-063-557-91	App c 758 18 0.9 1871 15 US-10-208-025-301 App c 759 18 0.9 1871 15 US-10-063-580-91	App c 756 18 0.9 1871 15 US-10-205-905-301 App c 757 18 0.9 1871 15 US-10-206-918-301	App c 754 18 0.9 1871 15 US-10-202-940-301 App c 755 18 0.9 1871 15 US-10-205-508-301	App c 752 18 0.9 1871 15 US-10-202-413-301 App c 753 18 0.9 1871 15 US-10-202-938-301	App c 750 18 0.9 1871 15 US-10-197-706-301 App c 751 18 0.9 1871 15 US-10-201-857-301	App C 748 18 0.9 1871 15 US-10-184-657-301 App C 749 18 0.9 1871 15 US-10-197-701-301	App c 746 18 0.9 1871 15 US-10-184-624-301 App c 747 18 0.9 1871 15 US-10-184-624-301	App c 744 18 0.9 1871 15 US-10-179-511-301 App c 745 18 0.9 1871 15 US-10-179-518-301
e 301, App a 301, App	C 807 18 0.9 1871 16 US-10-175-754-301 C 808 18 0.9 1871 16 US-10-176-480-301 C 809 18 0.9 1871 16 US-10-176-489-301 C 810 18 0.9 1871 16 US-10-176-489-301 C 811 18 0.9 1871 16 US-10-176-754-301 C 812 18 0.9 1871 16 US-10-176-754-301 C 813 18 0.9 1871 16 US-10-176-755-301	C 804 18 0.9 1871 16 US-10-175-744-301 C 805 18 0.9 1871 16 US-10-175-745-301 C 806 18 0.9 1871 16 US-10-175-745-301 C 807 18 0.9 1871 16 US-10-175-751-301	C 801 18 0.9 1871 16 US-10-174-591-301 C 802 18 0.9 1871 16 US-0-175-736-301 C 803 18 0 0 1071 16 US-10-175-742-301	D C 799 18 0.9 1871 16 US-10-174-587-301 D C 800 18 0.9 1871 16 US-10-174-589-301	1 C 795 18 0.9 1871 16 US-10-174-569-301 p C 790 18 0.9 1871 16 US-10-174-583-301	C 794 18 0.9 1871 16 US-10-173-698-301 C 795 18 0.9 1871 16 US-10-173-699-301 C 795 18 0.9 1871 16 US-10-173-707-301	C 792 18 0.9 1871 16 US-10-173-691-301 C 793 18 0.9 1871 16 US-10-173-694-301	20 C 790 18 0.9 1871 16 US-10-173-689-301 18 0.9 1871 16 US-10-173-690-301 18 0.9 1871 16 US-10-173-690-301	25	C 785 18 0.9 1871 16 US-10-184-647-301	pp c 783 18 0.9 1871 15 US-10-199-672-301 pp c 784 18 0.9 1871 16 US-10-006-172A-217	pp c 781 18 0.9 1871 15 US-10-063-735-91 pp c 782 18 0 1871 15 US-10-066-130A-217	PP     C 778     18     0.9     1871     15     US-10-006-041A-217       PP     C 779     18     0.9     1871     15     US-10-015-822A-217       PP     C 780     10     0.9     1871     15     US-10-015-387A-217	φρ c 7/6 18 0.9 1871 15 US-10-011-833/8-21/ μρ c 776 18 0.9 1871 15 US-10-063-588-91	C 773 18 0.9 1871 15 US-10-183-009-301 C 774 18 0.9 1871 15 US-10-017-4073-311 C 774 18 0.9 1871 15 US-10-017-4073-31	C 771 18 0.9 1871 15 US-10-206-907-301 C 772 18 0.9 1871 15 US-10-015-391A-217	C 769 18 0.9 1871 15 US-10-184-613-301 C 770 18 0.9 1871 15 US-10-187-739-301	C 766 18 0.9 1871 15 US-10-006-063A-217 C 767 18 0.9 1871 15 US-10-063-585-91 C 767 18 0.9 1871 15 US-10-070-73-73	c 764 18 0.9 1871 15 US-10-198-760-301 c 765 18 0.9 1871 15 US-10-201-772-301	c 762 18 0.9 1871 15 US-10-006-768A-217 c 763 18 0 0 1871 15 US-10-017-610A-217	1991 c 760 18 0.9 18/1 15 US-10-011-692A-217 18 0.9 1871 15 US-10-063-557-91	App c 758 18 0.9 1871 15 US-10-208-025-301 App c 759 18 0.9 1871 15 US-10-063-580-91	App c 756 18 0.9 1871 15 US-10-205-905-301 App c 757 18 0.9 1871 15 US-10-206-918-301	App c 754 18 0.9 1871 15 US-10-202-940-301 App c 755 18 0.9 1871 15 US-10-205-508-301	App c 752 18 0.9 1871 15 US-10-202-413-301 App c 753 18 0.9 1871 15 US-10-202-938-301	App c 750 18 0.9 1871 15 US-10-197-706-301 App c 751 18 0.9 1871 15 US-10-201-857-301	App C 748 18 0.9 1871 15 US-10-184-657-301 App C 749 18 0.9 1871 15 US-10-197-701-301	App c 746 18 0.9 1871 15 US-10-184-624-301 App c 747 18 0.9 1871 15 US-10-184-624-301	App c 744 18 0.9 1871 15 US-10-179-511-301 App c 745 18 0.9 1871 15 US-10-179-518-301
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C 806 18 0.9 1871 16 US-10-175-754-301 Sequence 30 C 808 18 0.9 1871 16 US-10-176-480-301 Sequence 30 C 809 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 810 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 811 18 0.9 1871 16 US-10-176-754-301 Sequence 30 C 812 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-759-301 Sequence 30 US-10-176-75	C 804 18 0.9 1871 16 US-10-175-744-301 Sequence 30 C 805 18 0.9 1871 16 US-10-175-745-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 1871 18 0.9 1871 18 US-10-175-751-301 Sequence 30 C 807 18 US-10-175-751-301 Sequence 30 C 807 1871 18 US-10-175-7751-301 Sequence 30 US-10-175-751-301 Sequence 30 US-10-175	C 801 18 0.9 1871 16 US-10-174-591-301 Sequence 30 C 802 18 0.9 1871 16 US-10-175-736-301 Sequence 30 C 803 18 0.9 1871 16 US-10-175-742-301 Sequence 30	b c 799 18 0.9 1871 16 US-10-174-587-301 Sequence 30 c 799 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301	1 C 797 18 0.9 1871 16 US-10-174-569-301 Sequence 30 p	c 794 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 1871 1871 1871 1871 1871 1871 1871 187	c 792 18 0.9 1871 16 US-10-173-691-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-691-301 Sequence 30 US-10-173-691-301	pp c 790 18 0.9 1871 16 US-10-173-689-301 Sequence 30 C 791 18 0.9 1871 16 US-10-173-690-301 Sequence 30 Sequence	pp c 788 18 0.9 1871 16 US-10-196-747-301 Sequence 3	op c 785 18 0.9 1871 16 US-10-184-573-301 Sequence 3 Se	pp   c 783 18 0.9 1871 15 US-10-199-672-301 Sequence 2 pp   c 784 18 0.9 1871 16 US-10-006-72A-217 Sequence 2	pp c 781 18 0.9 1871 15 US-10-063-735-91 Sequence 2 pp c 782 18 0.9 1871 15 US-10-066-130A-217 Sequence 2	PP C 778 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 779 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 780 18 0.9 1871 15 US-10-015-387A-217 Sequence 2	typ         c 7/6         18         0.9         1871         15         US-10-011-833/-217         Sequence           typ         c 776         18         0.9         1871         15         US-10-063-588-91         Segmence           typ         c 777         18         0.9         1871         15         US-10-063-588-91         Segmence	c 773 18 0.9 1871 15 US-10-183-009-301 Sequence C 774 18 0.9 1871 15 US-10-017-473-3-1 Sequence	C 771 18 0.9 1871 15 US-10-206-907-301 Sequence C 772 18 0.9 1871 15 US-10-015-391A-217 Sequence	C 769 18 0.9 1871 15 US-10-184-613-31 Sequence C 770 18 0.9 1871 15 US-10-187-739-301 Sequence	c 766 18 0.9 1871 15 US-10-006-063A-217 Sequence c 767 18 0.9 1871 15 US-10-063-582-91 Sequence	c 764 18 0.9 1871 15 US-10-198-760-301 Sequence c 765 18 0.9 1871 15 US-10-201-772-301 Sequence	c 762 18 0.9 1871 15 US-10-006-768A-217 Sequence c 763 18 0 0 1871 15 US-10-017-610A-217 Sequence	hpp: c 760 18 0.9 1871 15 US-10-011-692A-217 Sequence App c 761 18 0.9 1071 15 US-10-063-557-91 Sequence	App c 758 18 0.9 1871 15 US-10-208-025-301 Sequence App c 759 18 0.9 1871 15 US-10-063-580-91 Sequence	App c 756 18 0.9 1071 15 US-10-205-905-301 Sequence	App c 754 18 0.9 1871 15 US-10-202-940-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence	App c 752 18 0.9 1871 15 US-10-202-413-301 Sequence App c 753 18 0.9 1871 15 US-10-202-938-301 Sequence	App c 750 18 0.9 1871 15 US-10-197-706-301 Sequence	App C 748 18 0.9 1871 15 US-10-184-657-301 Sequence	App C 746 18 0.9 1871 15 US-10-184-524-301 Sequence	App c 744 18 0.9 1871 15 US-10-179-511-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 806 18 0.9 1871 16 US-10-175-754-301 Sequence 30 C 808 18 0.9 1871 16 US-10-176-480-301 Sequence 30 C 809 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 810 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 811 18 0.9 1871 16 US-10-176-754-301 Sequence 30 C 812 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-759-301 Sequence 30 US-10-176-75	C 804 18 0.9 1871 16 US-10-175-744-301 Sequence 30 C 805 18 0.9 1871 16 US-10-175-745-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 1871 18 0.9 1871 18 US-10-175-751-301 Sequence 30 C 807 18 US-10-175-751-301 Sequence 30 C 807 1871 18 US-10-175-7751-301 Sequence 30 US-10-175-751-301 Sequence 30 US-10-175	C 801 18 0.9 1871 16 US-10-174-591-301 Sequence 30 C 802 18 0.9 1871 16 US-10-175-736-301 Sequence 30 C 803 18 0.9 1871 16 US-10-175-742-301 Sequence 30	b c 799 18 0.9 1871 16 US-10-174-587-301 Sequence 30 c 799 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301	1 C 797 18 0.9 1871 16 US-10-174-569-301 Sequence 30 p	c 794 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 1871 1871 1871 1871 1871 1871 1871 187	c 792 18 0.9 1871 16 US-10-173-691-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-691-301 Sequence 30 US-10-173-691-301	pp c 790 18 0.9 1871 16 US-10-173-689-301 Sequence 30 C 791 18 0.9 1871 16 US-10-173-690-301 Sequence 30 Sequence	pp c 788 18 0.9 1871 16 US-10-196-747-301 Sequence 3	op c 785 18 0.9 1871 16 US-10-184-573-301 Sequence 3 Se	pp   c 783 18 0.9 1871 15 US-10-199-672-301 Sequence 2 pp   c 784 18 0.9 1871 16 US-10-006-72A-217 Sequence 2	pp c 781 18 0.9 1871 15 US-10-063-735-91 Sequence 2 pp c 782 18 0.9 1871 15 US-10-066-130A-217 Sequence 2	PP C 778 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 779 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 780 18 0.9 1871 15 US-10-015-387A-217 Sequence 2	typ         c 7/6         18         0.9         1871         15         US-10-011-833/-217         Sequence           typ         c 776         18         0.9         1871         15         US-10-063-588-91         Segmence           typ         c 777         18         0.9         1871         15         US-10-063-588-91         Segmence	c 773 18 0.9 1871 15 US-10-183-009-301 Sequence C 774 18 0.9 1871 15 US-10-017-473-3-1 Sequence	C 771 18 0.9 1871 15 US-10-206-907-301 Sequence C 772 18 0.9 1871 15 US-10-015-391A-217 Sequence	C 769 18 0.9 1871 15 US-10-184-613-31 Sequence C 770 18 0.9 1871 15 US-10-187-739-301 Sequence	c 766 18 0.9 1871 15 US-10-006-063A-217 Sequence c 767 18 0.9 1871 15 US-10-063-582-91 Sequence	c 764 18 0.9 1871 15 US-10-198-760-301 Sequence c 765 18 0.9 1871 15 US-10-201-772-301 Sequence	c 762 18 0.9 1871 15 US-10-006-768A-217 Sequence c 763 18 0 0 1871 15 US-10-017-610A-217 Sequence	hpp: c 760 18 0.9 1871 15 US-10-011-692A-217 Sequence App c 761 18 0.9 1071 15 US-10-063-557-91 Sequence	App c 758 18 0.9 1871 15 US-10-208-025-301 Sequence App c 759 18 0.9 1871 15 US-10-063-580-91 Sequence	App c 756 18 0.9 1071 15 US-10-205-905-301 Sequence	App c 754 18 0.9 1871 15 US-10-202-940-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence	App c 752 18 0.9 1871 15 US-10-202-413-301 Sequence App c 753 18 0.9 1871 15 US-10-202-938-301 Sequence	App c 750 18 0.9 1871 15 US-10-197-706-301 Sequence	App C 748 18 0.9 1871 15 US-10-184-657-301 Sequence	App C 746 18 0.9 1871 15 US-10-184-524-301 Sequence	App c 744 18 0.9 1871 15 US-10-179-511-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence
	C 806 18 0.9 1871 16 US-10-175-754-301 Sequence 30 C 808 18 0.9 1871 16 US-10-176-480-301 Sequence 30 C 809 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 811 18 0.9 1871 16 US-10-176-489-301 Sequence 30 C 812 18 0.9 1871 16 US-10-176-754-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-755-301 Sequence 30 C 813 18 0.9 1871 16 US-10-176-759-301 Sequence 30 C 813	C 804 18 0.9 1871 16 US-10-175-744-301 Sequence 30 C 805 18 0.9 1871 16 US-10-175-745-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 806 18 0.9 1871 16 US-10-175-748-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 18 0.9 1871 16 US-10-175-751-301 Sequence 30 C 807 1871 18 0.9 1871 18 US-10-175-751-301 Sequence 30 C 807 18 US-10-175-751-301 Sequence 30 C 807 1871 18 US-10-175-7751-301 Sequence 30 US-10-175-751-301 Sequence 30 US-10-175	C 801 18 0.9 1871 16 US-10-174-591-301 Sequence 30 C 802 18 0.9 1871 16 US-10-175-736-301 Sequence 30 C 803 18 0.9 1871 16 US-10-175-742-301 Sequence 30	b c 799 18 0.9 1871 16 US-10-174-587-301 Sequence 30 c 799 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301 Sequence 30 c 800 18 0.9 1871 16 US-10-174-589-301	1 C 797 18 0.9 1871 16 US-10-174-569-301 Sequence 30 p	c 794 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-698-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 18 0.9 1871 16 US-10-173-707-301 Sequence 30 C 795 1871 1871 1871 1871 1871 1871 1871 187	c 792 18 0.9 1871 16 US-10-173-691-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-694-301 Sequence 30 C 793 18 0.9 1871 16 US-10-173-691-301 Sequence 30 US-10-173-691-301	pp c 790 18 0.9 1871 16 US-10-173-689-301 Sequence 30 C 791 18 0.9 1871 16 US-10-173-690-301 Sequence 30 Sequence	pp c 788 18 0.9 1871 16 US-10-196-747-301 Sequence 3	op c 785 18 0.9 1871 16 US-10-184-573-301 Sequence 3 Se	pp   c 783 18 0.9 1871 15 US-10-199-672-301 Sequence 2 pp   c 784 18 0.9 1871 16 US-10-006-72A-217 Sequence 2	pp c 781 18 0.9 1871 15 US-10-063-735-91 Sequence 2 pp c 782 18 0.9 1871 15 US-10-066-130A-217 Sequence 2	PP C 778 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 779 18 0.9 1871 15 US-10-015-822A-217 Sequence 2 PP C 780 18 0.9 1871 15 US-10-015-387A-217 Sequence 2	typ         c 7/6         18         0.9         1871         15         US-10-011-833/-217         Sequence           typ         c 776         18         0.9         1871         15         US-10-063-588-91         Segmence           typ         c 777         18         0.9         1871         15         US-10-063-588-91         Segmence	c 773 18 0.9 1871 15 US-10-183-009-301 Sequence C 774 18 0.9 1871 15 US-10-017-473-3-1 Sequence	C 771 18 0.9 1871 15 US-10-206-907-301 Sequence C 772 18 0.9 1871 15 US-10-015-391A-217 Sequence	C 769 18 0.9 1871 15 US-10-184-613-31 Sequence C 770 18 0.9 1871 15 US-10-187-739-301 Sequence	c 766 18 0.9 1871 15 US-10-006-063A-217 Sequence c 767 18 0.9 1871 15 US-10-063-582-91 Sequence	c 764 18 0.9 1871 15 US-10-198-760-301 Sequence c 765 18 0.9 1871 15 US-10-201-772-301 Sequence	c 762 18 0.9 1871 15 US-10-006-768A-217 Sequence c 763 18 0 0 1871 15 US-10-017-610A-217 Sequence	hpp: c 760 18 0.9 1871 15 US-10-011-692A-217 Sequence App c 761 18 0.9 1071 15 US-10-063-557-91 Sequence	App c 758 18 0.9 1871 15 US-10-208-025-301 Sequence App c 759 18 0.9 1871 15 US-10-063-580-91 Sequence	App c 756 18 0.9 1071 15 US-10-205-905-301 Sequence	App c 754 18 0.9 1871 15 US-10-202-940-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence App c 755 18 0.9 1871 15 US-10-205-508-301 Sequence	App c 752 18 0.9 1871 15 US-10-202-413-301 Sequence App c 753 18 0.9 1871 15 US-10-202-938-301 Sequence	App c 750 18 0.9 1871 15 US-10-197-706-301 Sequence	App C 748 18 0.9 1871 15 US-10-184-657-301 Sequence	App C 746 18 0.9 1871 15 US-10-184-524-301 Sequence	App c 744 18 0.9 1871 15 US-10-179-511-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence App c 745 18 0.9 1871 15 US-10-179-518-301 Sequence

C C C C C C C C C C C C C C C C C C C	
1871 1871 1871 1871 1871 1871 1871 1871	1871 1871 1872 1873 1873 1873 1873 1873 1873 1873 1873
US-10-063-671-91 US-10-063-674-91 US-10-063-674-91 US-10-063-675-91 US-10-063-676-91 US-10-063-689-91 US-10-063-699-91 US-10-063-699-91 US-10-063-705-91 US-10-063-705-91 US-10-063-707-91 US-10-063-707-91 US-10-063-774-91 US-10-063-734-91 US-10-063-734-91 US-10-063-734-91 US-10-063-734-91 US-10-063-734-91 US-10-063-735-91	10-176-924-10-179-519-10-179-515-10-179-515-10-179-515-10-179-515-10-179-515-10-179-515-10-179-515-10-179-515-10-179-515-10-176-981-10-1063-564-10-1063-564-10-1063-564-10-1063-564-10-1063-662-10-10-1063-662-10-1063-662-10-1063-662-10-1063-662-10-1063-662-10-1063-662-10-10-10-1063-662-10-10-10-10-10-10-10-10-10-10-10-10-10-
Sequence 91, Seque	991111111111111111111111111111111111111
Appl Appl Appl Appl Appl Appl Appl Appl	1
918 929 921 921 922 922 922 922 922	
918 929 921 921 922 922 922 922 922	8888 18 0 8890 18 0 8990 18 0 8991 18 0 8992 18 0 8995 18 0 8996 18 0 8997 18 0 8997 18 0 9001 18 0 9001 18 0 9007 18 0 9007 18 0 9007 18 0 9008 18 0 9009 18 0
919 919 9211 118 9221 118 9221 118 9224 118 9225 118 9226 118 9227 118 9230 118 9331 118 9341 118 9341 118 9341 118 9341 118 9341	888 18 0.9 8890 18 0.9 8900 18 0.9 8921 18 0.9 8931 18 0.9 8941 18 0.9 895 18 0.9 896 18 0.9 897 18 0.9 9001 18 0.9 9002 18 0.9 9004 18 0.9 9005 18 0.9 9006 18 0.9 9007 18 0.9 9008 18 0.9 9009 18 0.9
918 918 919 921 118 0.9 922 118 0.9 922 118 0.9 922 923 924 118 0.9 925 118 0.9 925 118 0.9 933 118 0.9 933 118 0.9 933 118 0.9 933 118 0.9 933 118 0.9 934 118 0.9 935 118 0.9 936 118 0.9 937 118 0.9 938 938 118 0.9 939 931 118 0.9 931 932 933 118 0.9 933 934 118 0.9 934 935 936 118 0.9 937 938 938 939 939 940 941 941 942 943 944 945 946 947 948 948 948 948 949 949 949 949	888 18 0.9 1871 890 18 0.9 1871 891 18 0.9 1871 892 18 0.9 1871 893 18 0.9 1871 894 18 0.9 1871 895 18 0.9 1871 896 18 0.9 1871 897 18 0.9 1871 898 18 0.9 1871 900 18 0.9 1871 901 18 0.9 1871 902 18 0.9 1871 903 18 0.9 1871 904 18 0.9 1871 905 18 0.9 1871 906 18 0.9 1871 907 18 0.9 1871 908 18 0.9 1871 909 18 0.9 1871 909 18 0.9 1871 909 18 0.9 1871 910 18 0.9 1871 911 18 0.9 1871 912 18 0.9 1871 913 18 0.9 1871 914 18 0.9 1871 915 18 0.9 1871 916 18 0.9 1871 917 18 0.9 1871 918 0.9 1871 919 18 0.9 1871 919 18 0.9 1871 911 18 0.9 1871 912 18 0.9 1871 913 18 0.9 1871 914 18 0.9 1871 915 18 0.9 1871
918 18 0.9 1871 16 US 921 18 0.9 1871 16 US 922 18 0.9 1871 16 US 922 18 0.9 1871 16 US 923 18 0.9 1871 16 US 924 18 0.9 1871 16 US 925 18 0.9 1871 16 US 926 18 0.9 1871 16 US 927 18 0.9 1871 16 US 928 18 0.9 1871 16 US 929 18 0.9 1871 16 US 930 18 0.9 1871 16 US 931 18 0.9 1871 16 US 932 18 0.9 1871 16 US 933 18 0.9 1871 16 US 934 18 0.9 1871 16 US 935 18 0.9 1871 16 US 936 18 0.9 1871 16 US 937 18 0.9 1871 16 US 938 18 0.9 1871 16 US 939 18 0.9 1871 16 US 930 18 0.9 1871 16 US 931 18 0.9 1871 16 US 932 18 0.9 1871 16 US 933 18 0.9 1871 16 US 934 18 0.9 1871 16 US 935 18 0.9 1871 16 US 936 18 0.9 1871 16 US 937 18 0.9 1871 16 US 938 18 0.9 1871 16 US 939 18 0.9 1871 16 US 930 18 0.9 1871 16 US 931 18 0.9 1871 16 US 932 18 0.9 1871 16 US 933 18 0.9 1871 16 US 934 18 0.9 1871 16 US 935 18 0.9 1871 16 US 936 18 0.9 1871 16 US 937 18 0.9 1871 16 US 938 18 0.9 1871 16 US 939 18 0.9 1871 16 US 950 18 0.9 1871 16 US 951 18 0.9 1871 16 US 952 18 0.9 1871 16 US 953 18 0.9 1871 16 US 955 18 0.9 1871 16 US	888 18 0.9 1871 16 US-10-06. 899 18 0.9 1871 16 US-10-06. 891 18 0.9 1871 16 US-10-06. 891 18 0.9 1871 16 US-10-06. 892 18 0.9 1871 16 US-10-06. 893 18 0.9 1871 16 US-10-06. 894 18 0.9 1871 16 US-10-06. 895 18 0.9 1871 16 US-10-06. 896 18 0.9 1871 16 US-10-06. 897 18 0.9 1871 16 US-10-06. 899 18 0.9 1871 16 US-10-06. 899 18 0.9 1871 16 US-10-06. 899 18 0.9 1871 16 US-10-06. 900 18 0.9 1871 16 US-10-06. 901 18 0.9 1871 16 US-10-06. 902 18 0.9 1871 16 US-10-06. 903 18 0.9 1871 16 US-10-06. 904 18 0.9 1871 16 US-10-06. 905 18 0.9 1871 16 US-10-06. 906 18 0.9 1871 16 US-10-06. 907 18 0.9 1871 16 US-10-06. 908 18 0.9 1871 16 US-10-06. 909 18 0.9 1871 16 US-10-06. 910 18 0.9 1871 16 US-10-06. 911 18 0.9 1871 16 US-10-06. 912 18 0.9 1871 16 US-10-06. 913 18 0.9 1871 16 US-10-06. 914 18 0.9 1871 16 US-10-06. 915 18 0.9 1871 16 US-10-06. 916 18 0.9 1871 16 US-10-06. 917 18 0.9 1871 16 US-10-06. 918 0.9 1871 16 US-10-06. 919 18 0.9 1871 16 US-10-06. 911 18 0.9 1871 16 US-10-06. 912 18 0.9 1871 16 US-10-06. 913 18 0.9 1871 16 US-10-06. 914 18 0.9 1871 16 US-10-06. 915 18 0.9 1871 16 US-10-06. 916 18 0.9 1871 16 US-10-06. 917 18 0.9 1871 16 US-10-06. 918 0.9 1871 16 US-10-06. 919 18 0.9 1871 16 US-10-06.
918 18 0.9 1871 16 US-10-063-602-91 Sequence 919 1871 16 US-10-063-609-91 Sequence 920 18 0.9 1871 16 US-10-063-609-91 Sequence 921 18 0.9 1871 16 US-10-063-611-91 Sequence 922 18 0.9 1871 16 US-10-063-639-91 Sequence 923 18 0.9 1871 16 US-10-063-639-91 Sequence 924 18 0.9 1871 16 US-10-063-639-91 Sequence 925 18 0.9 1871 16 US-10-063-639-91 Sequence 927 18 0.9 1871 16 US-10-063-639-91 Sequence 928 18 0.9 1871 16 US-10-063-639-91 Sequence 929 18 18 0.9 18	889 18 0.9 1871 16 US-10-063-527-91 Sequence 91, 890 18 0.9 1871 16 US-10-063-527-91 Sequence 91, 891 18 0.9 1871 16 US-10-063-581-91 Sequence 91, 891 18 0.9 1871 16 US-10-063-583-91 Sequence 91, 892 18 0.9 1871 16 US-10-063-583-91 Sequence 91, 892 18 0.9 1871 16 US-10-063-593-91 Sequence 91, 892 18 0.9 1871 16 US-10-063-604-91 Sequence 91, 893 18 0.9 1871 16 US-10-063-604-91 Sequence 91, 896 18 0.9 1871 16 US-10-063-604-91 Sequence 91, 896 18 0.9 1871 16 US-10-063-604-91 Sequence 91, 897 18 0.9 1871 16 US-10-063-612-91 Sequence 91, 899 18 0.9 1871 16 US-10-063-642-91 Sequence 91, 900 18 0.9 1871 16 US-10-063-642-91 Sequence 91, 900 18 0.9 1871 16 US-10-063-642-91 Sequence 91, 901 18 0.9 1871 16 US-10-063-642-91 Sequence 91, 902 18 0.9 1871 16 US-10-063-642-91 Sequence 91, 903 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 903 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 904 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 905 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 907 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 908 18 0.9 1871 16 US-10-063-654-91 Sequence 91, 909 18 0.9 1871 16 US-10-063-651-91 Sequence 91, 909 18 0.9 1871 16 US-10-063-582-91 Sequence 91, 909 18 0.9 1871 16 US-10-063-597-91 S

1921 TEGETGETGETATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG		
	th 1895;	pred. No. 0; Length
961 AACTCCTACTGGAGAAACCCAAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACAGAGGCCC		y Match 100.0%: score 100.
		S
901	-:	, OKCANISM: Homo sapiens , FEATURE: : NAME/KEY. CTG
901		TYPE: DNA
841 CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC		SOFTWARE: FastSEQ for Windows Version 3.0
81		PRIOR FILING DATE: 1999-12-01 NUMBER OF SEO TO NOS. 2010
781 GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC		PRIOR FILING DATE: 2000-04-26
721 GAACAGGAAGAGGAAGGAAGGAAGAAGGACAGGAAGGACAGGAAGGACAGGAAGGACAGGAAGGAAGGACAGGAAGGACAGGAAGGACAGGAAGGACAGGAAGAA	-	CURRENT APPLICATION NUMBER: US/10/140,641A
QY 721 GAACAGGAAGAGGGAAGGGAAGGAAGGAAGAAGAG 720		TITLE OF INVENTION: CANCER ASSOCIATED ANTIGENS AND USES
Db 661 CAGGAGCCGACACAAGAACACACACACACACACACACAC		APPLICANT: Ono, Toshiro and Nakayama, Eiichi TITLE OF INVENTION.
<b>o</b> n (		<ul> <li>Sequence 23, Application US/10148641A</li> <li>Publication No. US20040086852A1</li> <li>GENERAL TAXABLE SECTION OF THE PROPERTY OF THE PR</li></ul>
601 TCCTTGGJAGGCCAGGAGCAGGAGCACAAGCAGGAGCAAGCAGGAGTGGAGCACAGG		KESULT 1 US-10-148-641A-23
541 TCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG		
** TTCCAGCCTGGCCTGAGAGGCTCAGCAACAAGGTGGAAGAGCTCCTACAATCCTCCTTG	Ë	
481 TCACCCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC	Sequence 217, App Sequence 301, App	0 18 0.9 1871 19
	22	8 18 0.9 1871 17 9 18 0.9 1871 17
421 CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC	22	6 18 0.9 1871 17 7 18 0.9 1871 17
421	30	18 0.9 1871 17 18 0.9 1871 17
361 CAGTTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGAG	$\omega$	18 0.9 1871 1: 18 0.9 1871 1:
361 CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCC	ωw	18 0.9 1871 1: 10 18 0.9 1871 1:
301 GTGCCGATGGTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGACTCTTCTGC	<u>ω</u> ω	88 18 0.9 1871 1 89 18 0.9 1871 1
301 GTGCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTTGAGTCTTTTTCTCC	ωωι	85 18 0.9 1871 1 86 18 0.9 1871 1
Db 241 ACCCACGGCTGCCGGAATCCCACACTCGTCCAGGTTGGACCACTATATIGAAAACCCACGGCTTA 300	Sequence 301, App Sequence 301, App Semience 301, App	83 18 0.9 1871 1 84 18 0.9 1871 1
QY 241 ACCCACGGCTGCCGAATCCCTGCCGACTGCCGTCCCGTGCA 240	M M	81 18 0.9 1871 1 82 18 0.9 1871 1
	A1 A1 I	18 0.9 1871 1 179 18 0.9 1871 1
	Sequence 217, App Sequence 217, App	18 0.9 1871 18 0.9 1871
121	Sequence 217, App Sequence 217, App	18 0.9 1871 18 0.9 1871
91 GCCGCTGGCTTCCCTTCACTCCTGAAGTGCTGCTCCTGCCTCTGGCACCTGCCGCA	Sequence 91, Appl Sequence 91, Appl Sequence 91 Appl	972 18 0.9 1871 973 18 0.9 1871
GCCGCTGGCTTCCCTCACTCCTGAAGGTGCTGCTCCTGGCTCTGGCACCTGCCGCA		970 18 0.9 1871 16 U
·	Sequence 217, App Sequence 217, App	968 18 0.9 1871 16 U
I GTTAGAGGCGGCTTGTGTCCACGGGACGCGGATCTTCTCCCGGCCATGAGGAAGCCA	Sequence 91, Appl Sequence 91, Appl	965 18 0.9 1871 16 U
ı	Sequence 217, App Sequence 217, App	C 963 18 0.9 1871 16 US-10-015-715A-217 C 963 18 0.9 1871 16 US-10-015-715A-217 C 964 18 0.9 1871 16 US-10-063-718-91
Page 8		961 18 0.9 1871 16 [

```
US-10-262-666-41

US-10-262-666-41

Sequence 41, Application US/10262666

Publication No. US20030180298A1

GENERAL INFORMATION:

APPLICANT: Nakayama, Eiichi

APPLICANT: Ono, Toshiro

APPLICANT: Old, Lloyd J.

APPLICANT: Hasegawa, Kosei

APPLICANT: Hasegawa, Kosei

APPLICANT: Mateushita, Hirokazu

TITLE OF INVENTION: CANCER-TESTIS ANTIGENS

FILE REFERENCE: L00461.70140

CURRENT APPLICATION NUMBER: US/10/262,666

CURRENT APPLICATION NUMBER: PCT/US02/12497
                                                                                                                                                                                                                                                                                                                            1861
                                                                                                                                                                                                                                                                                                                                                                                                                                1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                            1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGGCGTCTATTCTGCCCACACCCCAGCCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTGGAAGTACATGGAGGAGGAGGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                           TGACTTTACATAAAATGTTGATCTTCAAAAAAAA
                                                                                                                                                                                                                                                                                                              TGACTTTACATAAAATGTTGATCTTCAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                  TTGGGTTGGAGCAACAGTCCCAGAGAGAGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAMACTACTGTTCCTTCAMAAGCCAGCAGTGTCTGATGAGAMACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCAGCCCCTTGCCTCCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCAGCCCCTTGCCTGCCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCACTCAGAGGCCAGCCTGCAGCGCAACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCGCCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGCGGCGACACATGTCTACCTGTGGCCCTCTGTGACTTCTGCTTCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                            1895
                                                                                                                                                                                                                                                                                            1895
                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2002-04-19
PRIOR APPLICATION NUMBER: US 60/356,937
PRIOR FILING DATE: 2002-02-14
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/285,343
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 80
SOFTWARE: PatentIn version 3.1
SEQ ID NO 41
LENGTH: 1886
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (49)...(1680)
OTHER INFORMATION:
US-10-262-666-41
                   밁
                                                                              밁
                                                                                                                Ś
                                                                                                                                                   밁
                                                                                                                                                                              Ś
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.:
Best Local Similarity 100
Matches 1886; Conservative
                                                                                                                                                   601
                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                 721
                                                                                   661
                                                                                                                 661
                                                                                                                                                                                     601
                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCGCTGGCTTCCCTTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTAGAGGCGGCTTGTGTCCACGGGACGCGGCGGATCTTCTCCCGGCCATGAGGAAGCCA
                                          GAACAGGAAGAGGAAGAAGCAAGGAAGGAAGGACTAAGGAGGGACGGAGGCT
                                                                                                       TCCCTGGGAGGCAGGAGCAAGCGAGCACAAGCAGGAGCAAGGAGCAAGGAGCACAGG
                                                                                                                                                                                                                                         TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                           TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                              TCACCCACCACGATGACCTCCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                             CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGTTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCCCGATGGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGCCCGATGGTGCTGCTCCCAACCTTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCTTCTTCGCACTGCTGACCTCCAACCTGGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                       TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                     TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACGAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.5%; Score 1886;
100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                   720
                                                                                                                   720
                                                                                                                                                     660
                                                                                                                                                                                     660
                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
```

Ş

В S 밁 S В Ś

밁 5 밁 S 밁

S 밁 S 밁 S 밁 δ 뭐 Ş 밁 S 밁 S 문

781 OTT TOCTOTT TO ACTIONATE ACCORDANCE AND ACTIONATE ACTIONATE ACTIONATE AND ACTIONATE AND ACTIONATE A	781 GTGTCTCAGCTGCACACACACACACACACACACACACACA
RESULT 1  WE-10-05-117-52  WE-10-05-117-52  RE-10-05-117-53  RE-10-05-117-	Page 10

Ś

Ś 밁 S 밁 Ś 멍 Ś 밁 S В Ś В Ş 뫄 Ş 8 Ś 밁 Ş 밁 Ş В 8 В Ś 밁 Ś В Ş 밁 Ş ₽**b** Ş 8

```
1681
                                                                                                                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                             1681
                                                                                                                           1621
                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                             1621
                                                                                                                                                         1561
                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                          GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                          TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                         CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                     CTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                             CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCTGGAÄGTACATGGAGGAGGAGGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTCTCAGCTGCAGACAGACTCAGAGCCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                       TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                       CCAMACTACTGTTCCTTCAMAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                         CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGAGCTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                  CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTGGAAGTACATGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACTCCTACTGGAGAAACCAAAAACCCTTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACAGGAAGAGGAAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACAGGAAGAGGAGGGAAAGCAGGAAGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCT
1800
                                                          1740
                                                                                           1680
                                                                                                                         1680
                                                                                                                                                         1620
                                                                                                                                                                                         1620
                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                     1500
                                                                                                                                                                                                                                                                                                                    1500
                                                                                                                                                                                                                                                                                                                                                    1440
                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                              1740
                                                                                                                                                                                                                                                     1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
```

밁 Ś 문 Ś 밁 Ś 밁 Ś 닭 S 망 Ş 밁 S 밁 S 밁 Ś 밁 S 밁 S 문 S В á 밁 Ś 밁 Ś 밁 Ş 맑 S 밁 Ş

```
Sequence 54, Application US/10085117

Publication No. US20030232334A1

GENERAL INFORMATION:
APPLICANT: MORTIS, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER FILE REFERENCE: 529452000121

CURRENT APPLICATION NUMBER: US/10/085,117

CURRENT FILING DATE: 2002-02-27

PRIOR APPLICATION NUMBER: US 09/798,586

PRIOR FILING DATE: 2001-03-02

NUMBER OF SEO ID NOS: 361

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 54

LENGTH: 1632

TYPE: DNA

ORGANISM: Homo sapiens

US-10-085-117-54
                  S
                                                  밁
                                                                         S
                                                                                                       문
                                                                                                                             á
                                                                                                                                                           밁
                                                                                                                                                                                 S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
US-10-085-117-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1632; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1741
481
                       529
                                                  421
                                                                          469
                                                                                                       361
                                                                                                                                409
                                                                                                                                                           301
                                                                                                                                                                                      349
                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                          289
                                                                                                                                                                                                                                                                                              229
                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                    169
                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACGCCAGACCTTCCAGCCCTGGCCCTGAGAGGGCTCAGCAACAACGTGGAAGAGCTCCTA 588
                                                                                                                       GTCCTGTGTTCCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCT
                                                                                                                                                                          GAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGA
                                                                                                                                                                                                                                                                                                                       ACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGC
                                                                                                                                                                                                                                                                                                                                                                               TCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCCATCTCACCACTTCACAGTGACA
                                                                                                       GTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCT
                                                                                                                                                           GAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGA
                                                                                                                                                                                                                  AACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTT
                                                                                                                                                                                                                             AACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTT
                                                                                                                                                                                                                                                                     CGTCTCCGTGCAACCCACGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAA
                                                                                                                                                                                                                                                                                    CGTCTCCGTGCAACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCTGGACCAATATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGACTTTACATAAAATGTTGATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGGGTTGGAGCAACAGTCCCAGAGAGAGGGCCACGGTGGGAGCTGCGCCCTTAAAAGA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86.1%; Score 1632; Dilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1800
                                                  480
                                                                                                        420
                                                                                                                                468
                                                                                                                                                            360
                                                                                                                                                                                      408
                                                                                                                                                                                                                300
                                                                                                                                                                                                                                          348
                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                               288
                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                    228
                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                         168
                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                               108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
1441 TATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTCATGAGAAACCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                949 ATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCC 1008
                                                                                                                                                                                                                                               GGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGC
                                                                                                                                                                                                                                                                                                                                                                         AATCGGAAGGTGTCCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCT
                                                                                                                                                                                    ĠĠĊĀĀĀĀĠŗĠĀĠĠĀĊĠŢŗĠŗĠĊŢŗĊĠĀŗĠĠĀĠĊĊĀĠĠĀĠŗŢĊĀĠĊĀĊĊŢŗĠĀĊŢĊŢĀĠĠĊ 1620
                                                                                                                                                                                                                                                                                                                                                                                                                               AATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGACTGAGTTGCTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGAC 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rferedrátáce elektriáce a recentado elektrico de la recentado elektrico elektrico elektrico elektrico de la recentado elektrico elektric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTC 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTCCCCAGAATCAGGCCGGCTTTTACGGGCTGGATTTGTACGGTTGGGCTCCACATGGAC 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGAC 1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGACTCCCTTTGTCAGCCCTTGCTTGCCTCCCAGAGCCTGTCCCATCGGCAACCAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGACTCCCTTTGTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ahácírtádalachártácchactronalaádachalachtráchalachachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtrachachtracha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rereacaeacciries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGTCCTTGGTTTCGGGAAGTCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGACCTTGGTTTCGGGAAGTCCGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cácacadadecerregerecregreción arregarecada acades con contra en contra con contra con contra 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chárchteháácchtheirtheirtheicheachachacháchácháchachteháchachachteháthachachachteháthachachteháthachachteháthachachteháthachachteháthachachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthachteháthac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACGGGAGGCTGTGTGTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACGGGAGGCTGTGTCTCAGCTGCAGACAGACTCAGAGCCCCAAGTTTCACTCTGAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĠŔĠĊĀŔĠĀĠĠĠĠĸĀĊŔĠĠŔĀĠĸĠĠĠĠĠĸĸĬĸĠĊŔĠĠŔŔĠĸĬĸĠĠĸĊŔĠĠĠĸĊŢĸŔĠĠĸĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGGCAGAAACAGGAA 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĊĀĀŦĊĊŦĊĊŦŦĠŦĊĊĊŦĠĠĠĠĠĠĊŔĠĠĀĠĊĀĀĠĊĠĊĊŔĠĀĠĊĀĊĀĀĠĊĀĠĠĀĀĠĠĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGA
                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                          Ś
                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5

US-10-719-993-124

Sequence 124, Application US/10719993

Publication No. US20040265849A1

GENERAL INFORMATION: Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: ALZHBIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF

CURRENT APPLICATION NUMBER: US/10/719,993

NUMBER OF SEQ ID NOS: 55342

SEQ ID NO 124

LENGTH: 1892

TYPE: NAM

TYPE: NAM

TYPE: NAM

RESULT 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo |
S-10-719-993-124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                   544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1880; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621 CAGTTCGGATGA 1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                              TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                        rrccadeceredecreadadecreadedadeadedadedecrecracadrecerecered
                                                                                                                                                                                                                                                                                                                                                                         TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACCCACCACGATGACCTCCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GTTAGAGGCGGCTTGTGTGCCACGGGACGCGGGCGGATCTTCTCCGGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĊĀĠĊĊĀĠŦĊĸĊŦĀŦŦĊŦĊŦĊĀĊĊŤĀĀĊĀĊŦĊŦĊĀĀĠĠĀĠĀŦĀĠĀĀĠĊŦŦĊĀĠĊŦĠĀĀĠŦĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCCAGTCTCTATTCTCCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĠŦĠĊĊĠĠĀŦĠĠŦĠĊŦĠŦĊŦĠĊŦĊĊĀĀĊĊŦĊĊĊŦŦĀŦĠĊĊŦĊĊŦĠĠŦŦŦĠĀĠŦĊŦŦŦĊŦĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Acceaceácitáceáda a receacacite de receaceácite de constant de con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ċĠĊŦŦċŦŦĊĠĊĀĊŦĠĊŦĠĀĊŦĊĊĀĀĊĊŦĠĠĀĀĠĠĊĀĠĀĠĀĊŦĀĊĊŦĠĊĊĠŦĊŦĊĊĠŦĠĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gicciadea rricea croade coroca croca a Goa de Corororororo de Conara a Coa a racea a Conara Coa a Conara Coa a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCGCTGGCTTCCCTCACTCCTGAAGGTGCTGCTGCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grradaddecaderrigiereckodddaeddecadddarerrererere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         décachádeirideiridecidakericeidakádia didetidetideirideirideda deiridecide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1530; DE
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                             663
                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
```

Ś 망 Ś 망 Ś 뮍 Š 밁 Ś 밁 Ś В Ś 문 Ó

1009

781

721 769 661 709 601 649 541

961

Ś 밁 Ś 밁 Ś 밁 Ş В Ş 멍 Ş 밁 Ś 밁 Ş 밁 Ś 밁 Ś

1609 1501 1549

CAGTTCGGATGA 1680

유

밁

```
1384
                                                                           1684
                                                                                                                                                 1624
                                                                                                                                                                                                                                                                                                1504
                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1084
                                                                                                            1681
                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                          1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
                     ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGTCTCAGCTGCAGACAGAGCTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACAGGAAGAGGAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCT
                                                                       GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                             GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                               GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                        GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                              CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                   CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                      CTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                             CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCAGCCCCTTGCCTCCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCACTCAGAGGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCACTCAGAGGCCAGCCTGCAGCGCGAACAATGCGACACCTCCCACAAGACTCCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCGGCGACACATGTCTACCTGTGGCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTGGAAGTAYATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATRCCTGCATCATAACCCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCCTCTTTTGCTCCCCGGGTACGAGAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACAGGAAGAGGAGGAAAGCAGGAAGAAGGACAGGGACTAAGGAGGGACGGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                       1743
                                                                                                                                               1683
                                                                                                                                                                                  1680
                                                                                                                                                                                                                                                           1620
                                                                                                                                                                                                                                                                                                                                 1560
                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
1803
                                                                                                          1740
                                                                                                                                                                                                                       1623
                                                                                                                                                                                                                                                                                                1563
                                                                                                                                                                                                                                                                                                                                                                      1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      723
```

성 유

**중 음 경** 

8 8 8 8 8 8 8 8 8 8 8 8 8

경 유

경 유

Ś

8

밁

S

밁

8 8 8 8

뭐

```
TOPOLOGY: linear;

MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-746-783-77
                   S
                                                 밁
                                                                           Ş
                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-746-783-77

Sequence 77, Application US/09746783;

Publication No. US20030044935A1

; GENERAL INFORMATION:
                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                                    Query Match
Best Local Similarity
Matches 1594; Conserv
                                                                                                                                                                                                                                                                                                                                           TELEFAX: (617) 742-4214
INFORMATION FOR SEQ ID NO: 77:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/746,783
FILING DATE: 21-Dec-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Milasincic, Debra J.
REGISTRATION NUMBER: 46,931
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Jacobs, Kenneth
                    131
                                                   65
                                                                              71
                                                                                                                                           11
                                                                                                              S
                                                                                                                                CGACTCAGGCCCCCACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCG
                                                                     TCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCCTGCCCCAGCACTT
                                                                                                             STATE: MA
COUNTRY: U.S.A.
                                                   TCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATT
                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Genetics Institute,
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACTTTACATAAAATGTTGATCTTCA 1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGGTTGGAGCAACAGTCCCAGAGAGGGGCCAYGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                              LENGTH: 1899 base pairs
                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (617) 227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACTTTACATAAAATGTTGATCTTCA 1890
                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treacy, Maurice
Spaulding, Vikki
Agostino, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Howes, Steven H.
Fechtel, Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Racie, Lisa A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               McCoy, John M.
LaVallie, Edward
                                                                                                                                                                                     78.8%;
99.9%;
                                                                                                                                                                       0;
                                                                                                                                                                                       Score 1494;
Pred. No. 0;
                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inc.
                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                     10;
                                                                                                                                                                       2;
                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.30
                                                                                                                                                                                                       1899;
                                                                                                                                                                       0
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1860
                      190
                                                   124
                                                                              130
                                                                                                             64
```

Ś

RESULT 7  US -09-37-945-90 Sequence 90, Application US/03397945 GENERAL FINE NO. US20030065139A1 GENERAL FINE NO. US20030065139A1  APPLICANT HAMAI Genome Sciences, Inc. et al. ITIME OF SERINVENTION: 95 Human secreted proteins CIDERENT FILLCATION NUMBER: US/09/337,945 PRIOR PILL APPLICATION NUMBER: US/09/337,945 PRIOR PILL APPLICATION NUMBER: US/09/337,945 PRIOR PILL APPLICATION NUMBER: 60/078,566 PRIOR PILL APPLICATION NUMBER: 60/078,576 PRIOR PILL APPLICATION NUMBER: 60/078,576 PRIOR PILL APPLICATION NUMBER: 60/078,576 PRIOR PILL APPLICATION NUMBER: 60/078,579 PRIOR PILL APPLICATION NUMBER: 60/078,581 PRIOR PI	Qy 1271 TGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCT 1330  Db 1265 TGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCT 1320  Qy 1331 TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGCGCTTGCCA 1320  Db 1325 TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA 1390  pb 1325 TTTACGGGCTGGAAGATTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA 1390  1391 CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCC 1450  Db 1385 CGAAAGGCTGTGAAAAGTGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCC 1440  Qy 1451 AGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTAATCCAGACTAACTA

Ś В ঠ B

ई В

Ś

음 성

음 성

Ś

753 ACAGGGGACTAAGGAGGGACGGAAGGCTGTGTCTCAGCTGCAGACAGA	33 CGGATCTTCTCCGGCCATGAGGAAGCCAGCCGAGGCTTCCTTC
RESULT 8 US-10-653-595-90 i Sequence 90, Application US/10653595 publication No. US20040048304A1 i GENERAL INFORMATION: APPLICANT: Ruben et. al. i TITLE OF INVENTION: 95 Human secreted proteins FILE REFERENCE: PZ027P1C1 CURRENT FILING DATE: 2003-09-03 PRIOR APPLICATION NUMBER: US/10/653,595 CURRENT FILING DATE: 1999-09-17 PRIOR FILING DATE: 1999-09-17 PRIOR APPLICATION NUMBER: PCT/US99/05804 PRIOR APPLICATION NUMBER: PCT/US99/05804 PRIOR APPLICATION NUMBER: 60/078,566 PRIOR FILING DATE: 1998-03-19 PRIOR APPLICATION NUMBER: 60/078,576 PRIOR FILING DATE: 1998-03-19 PRIOR APPLICATION NUMBER: 60/078,576 PRIOR APPLICATION NUMBER: 60/078,573 PRIOR APPLICATION NUMBER: 60/078,574 PRIOR APPLICATION NUMBER: 60/078,574 PRIOR FILING DATE: 1998-03-19 PRIOR APPLICATION NUMBER: 60/078,579 PRIOR APPLICATION NUMBER: 60/078,579 PRIOR APPLICATION NUMBER: 60/078,579 PRIOR APPLICATION NUMBER: 60/078,579 PRIOR FILING DATE: 1998-03-19	Oy  1113 TTTCGGGAAAGTCGGTCTTGGACAGCCTTCGGCCGCACACATGTCTCCCTCTGTGTTGCCCTCTTG 1101

뫄

Ş

음 성

유성

유정

Ś

8 8 8 8

중 음 경

```
PRIOR APPLICATION NUMBER: 60/080,314
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080,312
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/078,578
PRIOR FILING DATE: 1998-03-19
Remaining Prior Application data removed - {
NUMBER OF SEQ ID NOS: 470
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 90
LENGTH: 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA; ORGANISM: Homo sapiens US-10-653-595-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 1794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Sim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142
                                             GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \mathfrak{a}
                                                                                                                                                                                    A CA GGG GA CTA A GGA GGGA GGG GGA GGGT GT GT CT CA GCT GCA GA CA GA GT CA GA GC CCA A
                                                                                                                                                                                                                                                ĊŔĀĠĊŔĠĠŔĠĊŔŔĠĠŔĠŦĠĠŔĠĊŔĊŔĠĠĊŔĠĠŔĠĊĊĠŔĊŔĊŔŔĠŔŔĊŔĊŔĸĠĊŔĠĠŖŖĠŖ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ceregaadaderecracianarecrecerrereceredadadecadedadecadecedadeca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                caadgadaradaagerreaderidaagrereadeeadedacaardacereeedarendee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĊŦĀĊŦĀŦĠĊĊĀĀĠĀĠĀĠŦĊĊŦĠŦĠŦŦĊĊĊĀĠĊĊĀĠŦĊŦĊŦĀŦŦĊŦĊŦĊĀĊĊŦĀĀĊĀĊŦĊŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrardechtechterringaererrinerechterreachtektreactaterrechtechtechter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCGTTGCCTCCAACCACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠĊŢĠĠĀĊĊĀĀŢĀŢĠĀĀĀĀĊĊĀĊĠĠĊŢŢĀĠŢĠĊĊĠĠŢĠĠŢĠĊŢĠŢĊŢĠĊŢĊĊĀĀĊĊŢĊĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        decadadachaccidecenterechecadeceacectecedenteceacactechecadecece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĠĊŦĠĊŦĊĊŦĠĊĊŦĊŦĠĠĊĂĊĊŦĠĊĊĠĊĀĠĊĊĊĀĠĠĂŦŦĊĠĀĊŦĊĀĠĠĊĊŦĊĊĂĊŦĊĊĀĠĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAAGAATTCGACTCAGGCCCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cidair errene a de la cida dela cida de la cida de la cida de la cida de la cida del cida de la cida del cida d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGATCTTCTCCGGCCATGAGGAAGCCAGCCGCTGGCTTCCCTTCCCTCACTCCTGAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67.8%;
nilarity 99.7%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1284; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      See File
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       з
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        u
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PALM
                                                                                                    872
                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                              812
                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
RESULT 9
US-10-296-115-693
; Sequence 693, Applicat
; Publication No. US2004
; GENERAL INFORMATION:
; APPLICANT: Hyseq Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D
                                                                                                                                                                                                                                                                                                                                                                                                 1759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACACCCCAGCCCA 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cherecerea de conservados de la conservada de la conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcreareaeanaice de la la recessa de la reces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTA 1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTG 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĠĀTTTĠŦĠĀĊĀĊĀĠĀĊŦĀŦĀŦĊĊĀĠŦĀĊĊĊĀĀĀĊŦĀĊŦĠŦŦĊĊŤŤĊĀĀĀĀĠĊĊĀĠĊĀĠŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA
                                                                                     Application US/10296115
._US20040053248A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AĞTCTCTĞĞĞTĞĞĞTÇCAĞACTĞAĞTTCCTTAĞCTTÇCAĞĞATĞĞĞĞA-İTÇCCTACÇAĞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rédectrécia christine de la rédectre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGCCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCG 1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cárcascaáccas a de marca de contra d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCGACACCACAAGACTCCCTTTG-CAGCCCCTTGCTTGCCTCCCAGAGCCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reactricied incineral additional reaction of the contract of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rfrcedaAAerceercieneAcAeccrredeeceeceAcAcArercrAccrereccre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTCGGGAAGTCGGTCTGTGACAGGCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGAGATCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cerectéchéchéctécechéheagh-écerréctégréerégrécthriteghregréghehn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGATGAAATGAAATATATGATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a gagreracreerargaraarggagaacareeaagagerearregareageeeaggaaar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : AGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA
                                                                                                                                                                                                                                                                                                                                     1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861
```

В Ś 문 Ş DЪ Ş

문 S 문 Ş В Ś В ş В 8 В 8 밁 Ş 밁 δ 밁 Ś В Ś

1110

1416

1050

1296 990

1356

```
; TITLE OF INVENTION: NO. US20040053248A1el Nucleic Aci
FILE REFERENCE: 784PCT
CURRENT APPLICATION NUMBER: US/10/296,115
; CURRENT FILING DATE: 2002-11-18
; PRIOR APPLICATION NUMBER: US09/488,725
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US09/552,317
; PRIOR APPLICATION NUMBER: US09/552,317
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 1478
; SEQ ID NO 693
                                                                                 Ś
                                                                                                                        밁
                                                                                                                                                   ঠ
                                                                                                                                                                                    뮹
                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-296-115-693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1273; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1671
                                                                                                                          1057
                         871
                                                                                      811
                                                                                                                                                           751
                                                                                                                                                                                             997
                                                                                                                                                                                                                               691
                                                                                                                                                                                                                                                                  937
                                                                                                                                                                                                                                                                                                  631
                                                                                                                                                                                                                                                                                                                                    877
                                                                                                                                                                                                                                                                                                                                                                       571
                                                                                                                                                                                                                                                                                                                                                                                                         817
                                                                                                                                                                                                                                                                                                                                                                                                                                         511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91
GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                            CACAAGCAGGAGCAAGGAGTGGAGGACCAGGAGCAGGACCAAGAACAAGCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCAGCCCTCTCTCCCTACCGAATACGAACGCTTCTTCGCACTGCTGATCCCAACCTGG
                                                                           AAGTTTCACTCTGAATCTCTATCTTCTAACCCCTTCCTCTTTTTGCTCCCCGGGTACGAGAA
                                                                                                                          CACAAGCAGGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGGAA
                                                                                                                                                                                                                                                                                                                                   AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                    CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGGCTGCCGGAATCCCCACACTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGGCTGCCGGAATCCCACACTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCTGCTCCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCA
                                                                                                                                                                                                                                                                                                                                                                     AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1173; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Acids and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                      1176
                                                                                      870
                                                                                                                        1116
                                                                                                                                                                                           1056
                     930
                                                                                                                                                           910
                                                                                                                                                                                                                                                                996
                                                                                                                                                                                                                                                                                                690
                                                                                                                                                                                                                                                                                                                                   936
                                                                                                                                                                                                                                                                                                                                                                     630
                                                                                                                                                                                                                                                                                                                                                                                                       876
                                                                                                                                                                                                                                                                                                                                                                                                                                        570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150
                                                                                                                                                                                                                            750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/978,360A
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: US 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-12-17
PRIOR FILING DATE: 1997-12-17
PRIOR PELICATION NUMBER: US 60/074,121
PRIOR APPLICATION NUMBER: US 60/074,121
PRIOR APPLICATION NUMBER: US 60/081,563
PRIOR APPLICATION NUMBER: US 60/081,563
PRIOR APPLICATION NUMBER: US 60/096,116
PRIOR APPLICATION NUMBER: US 60/096,116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-978-360A-262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 262, Application US/09978360A
Publication No. US20040110939A1
GENERAL INFORMATION:
APPLICANT: Edwards, Jean-Baptiste Dumas Milne
 PRIOR FILING DATE: 1998-12-17
PRIOR APPLICATION NUMBER: US 09/247,155
PRIOR FILING DATE: 1999-02-09
Remaining Prior Application data removed
NUMBER OF SEQ ID NOS: 810
SOFTWARE: Patent.pm
SEQ ID NO 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
APPLICANT: Jobert, Severin
APPLICANT: Clusel, Catherine
TITLE OF INVENTION: Complementary DNA's Encoding Proteins with Signal Peptides
FILE REFERENCE: 56.US4.CIP
                                                                                                                     APPLICATION NUMBER: US 09/191,997
FILING DATE: 1998-11-13
APPLICATION NUMBER: US 09/215,435
FILING DATE: 1998-12-17
APPLICATION NUMBER: PCT/IB98/02122
                                                                                                                                                                                                           APPLICATION NUMBER: US 60/099,273 FILING DATE: -09-04
                                                                                                                                                                                                                                              FILING DATE: 1998-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGGGCTCCACATG 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGGGCTCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTGCCTTGCCTCCCAGAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTTCCTGCAGCTGCCCCACACAGAGGCCCTTGCTGGTGCTGTTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATACCTGCATCATAACCCCCCACAGCCCAAGGCCTGGAAGTACATGGAGGAGGAGGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCTCCTGCAGCTGCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1671
                                                    See File Wrapper
```

1656 1350 1596 1290 1536 1230 1476 1170

or PALM

TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
FEATUR

964

NAME/KEY: polyA site ; LOCATION: 953..963 US-09-978-360A-262

NAME/KEY: polya signal LOCATION: 921..926

Query Match
Best Local Similarity 99.3
948; Conservative

27.9%;

```
FEATURE:
FORMATION:
FEATURE:
F
                                                                                                                                                                                                                                                                                                                                                                                               509 CACCCCACTICACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA 568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       422 TÓTCAAGGAGATAGAASCTTCAGCTGAAGTCTCACCCACCACAGATGACCTCCCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               210 GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                               AAGAGGGGCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGAAGGAAGCAGGAAGCAGGAAG
                                                                                                                                                                                                                                                                                                                                       AGCACAAGCAGGAGGAAGGAGTGGAGGACAGGCAGGAGGACCACAAGAACACAAGGAGCAGG 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Acaacorosa a a constructor de la compositor de la composi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90 GGTGCTGCTCCTGCCTGCGCACCTGCCGCAGGCCCAGGATTCGACTCAGGCCCCACTCC 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             caccicactricacagradoadaacoccagacerricadoceragecricagagagericaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAG 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACAC 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cccriarisccrccragrificacicifricisccacricacitacitaciaccorracciateca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cerciaerarecandes es establicas es establicas es establicas es establicas es establicas es establicas establic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccádchadá ccád haratedad a decada contradores con contradores de c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĠĀĀĠĠĊĀĠĀĸĀĊŤĀĊĊŤĠĊĊĠŤĊŤĊĊĠŤĠĆĀĀĊĊĊĀĆĠĠĊŤĠĊĊĠĠĀĀŤĊĊĊĀĊĀĊŤĊĠŤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AddeAdecererererectacedAATAceAAceerretrectedAcrecreacedAceere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGCTGCCTGCCTGGCACCTGCCGGAGCAGGATTCGACTCAGGCCTCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 528; DB 11; Length 964; Pred. No. 6.4e-268; Indels
                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11

US-10-719-993-6794

i Sequence 6794, Application US/10719993

i Publication No. US20040265849A1

i GENERAL INFORMATION:

APPLICANT: CARGILL, Michele et al.

ITITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

FILE REFERENCE: CLO01496

CURRENT APPLICATION UNMEER: US/10/719,993

i UMBER OF SEQ ID NOS: 55342

i SOFTMARE: FastSEQ for Windows Version 4.0

ENGTH: 21347

TYPE: DNA

ORGANISM: Homo sapiens
RESULT 12
                                                                                                                                                             밁
                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Simi
Matches 471;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                  9172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8992 ACAGGAAGAGCAAGAAGAAGAACAGGAAGAAGAGGAAGGAAAGGAAGGAAGGAAGGACAGGAAC 9051
                                                                                                                                                                                                                                                                                                                                                                                                                                                       882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8872 GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGGAAGCGCCAGAGGCACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8812 Agrīgacagaacgecagacerreceagecerregecrigagaggerreageaacaacgriggaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                522 AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA 581
                                                                                                                            GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAG 992
                                                                   GAĀTĠĀĀĀTĀTĠĀTĠĀTĠĀĠĀĀĊŦĊĊŦĀĊŦĠĠĀĠĀĀĀĊĊĀĀĀĀĊĊĊŦĠĠĊĀĠ
                                                                                                                                                                                                                                                        Techándátáátádátádátecáddageteáttegátegáteageteagaaatagatagaát
                                                                                                                                                                                                                                                                                                                TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                             rdááretetáretrictalacetricetetriregetececegadiaciádalagrágagietrae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  thadesadesadesades retreteres en care a como a como en                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               902 AAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAA 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            929 AAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 24.9%; Score 471; DB 18; Length 21347; Similarity 100.0%; Pred. No. 7.1e-238; 71; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            869 AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       809 CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAG 868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCĀĀGGĀGTĀGGĀGCĀGGĀGGĀGGĀGGĀGCĀCĀCĀĀGĀĀÇĀCĀĀGCĀGGĀĀGĀĀGĀGGGGGCĀĢĀĀ 8991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTAGAGTCTACTCCTATGATAATGGAGAAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             9171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
```

Ş 밁 Ś 망 Ś 밁 Ś B Ş 밁 Ş В Ş 밁 Ś 8 Ś 밁 Ş 밁 Ś ₽ á

542

569

362 390

242

270

```
RESULT 13
US-09-918-995-14842
US-09-918-995-14842; Application US/09918995
Sequence 14842, Application US/09918995
Publication No. US20030073623A1
GENERAL IMPORMATION:
HYBEQ, Inc.
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REFERENCE: 20411-756
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                       무
                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: variation
; LOCATION: (1)...(29346)
; OTHER INFORMATION: n = any nucleotide
US-10-085-117-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: MOTTIS, David W.
APPLICANT: Engelhard, Eric K.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND ME:
FILE REFERENCE: 529452000121
CURRENT APPLICATION NUMBER: US/10/085,117
CURRENT FILING DATE: 2002-02-27
PRIOR APPLICATION NUMBER: US 09/798,586
PRIOR FILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 52, Application US/10085117 Publication No. US20030232334A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 471;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 52
LENGTH: 29346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13052
                                                                                                                                                                                                                                                                                                                                                                                                                                             822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522 AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCCACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGAGAGAGGGGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA
                                                                                                                                                                                                                                                                                                                               TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAATCTCTATCTTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGA
                                                                                                                                                                                                                                                            GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAG 13282
                                                                                                                                                                                                                                                                               GAATGAAATATATGATGAGAACTCCTACTGGAGAAAACCAAAAACCCTGGCAG 992
                                                                                                                                                                                                                                                                                                                                                          TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAAATAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                         TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24.9%; Sur.
, 100.0%; Pr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 471; DB 17; Pred. No. 7e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        METHODS FOR CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 29346;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                       13171
                                                                                                                                                                                                                                                                                                                                                                                                                                           881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                     941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
Sequence 7043, Application US/10719993

Publication No. US20040265849A1

GENERAL INFORMATION:

APPLICANT: CARGILL, Michele et al.

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES

FILE REFERENCE: CL001496

CURRENT APPLICATION UNMBER: US/10/719,993

CURRENT FILING DATE: 2003-11-24

NUMBER OF SEQ ID NOS: 55342

SOPTMARE: FastSEQ for Windows Version 4.0

SEQ ID NO 7043

LENGTH: 24923
; ORGANISM: Homo sapiens ; FEATURE; NAME/KEY: misc_feature; LOCATION: (1)...(24923); OTHER INFORMATION: n = US-10-719-993-7043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; FEATURE:
, NAME/KEY: misc_feature
; LOCATION: (1)...(469)
; OTHER INFORMATION: n = A,T,C
US-09-918-995-14842
                                                                                                                                                                                                                                                                                                                                                            US-10-719-993-7043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: FastSEQ for Windows
SEQ ID NO 14842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 429; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 469
TYPE: DNA
ORGANISM: Homo mapiens
                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1056 CTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGATCCTTGGTTT 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                     460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996 CCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAAATAC 1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     936 TGAAATGAAATGAAATATATGATGAGAAACTCCTACTGGAGAAACCAAAACCCTGGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40 TGAAATGAAATGAAATATATGATGAGAAACTCCTACTGGAGAAAACCCAAAACCCTGGCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCCACATG 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGA 1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATG 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTTACGGGCTGGATTTGTACGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGAGATCCTTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGCAGCTGCCCACACAGAGGCCTTGCTGGTGCTGTTCGATCGTGGAGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                     469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20.0%;
                    A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 379; DB 10;
Pred. No. 3.6e-189;
                    ō
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G
                      ö
                  insertion/deletion polymorphism (see Tables 1-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                       USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

ITILE OF INVENTION: NOWEL NUCLEIC ACID SEQUENCES OBTAINED  FILE REFERENCE: 2041;758  CURRENT APPLICATION INFRAMER: US/09/918,995  FRICE REFERENCE: 2041;758  CURRENT FILING DATE: 2001-07-30  FRIOR APPLICATION NUMBER: US/09/235,076  PRIOR APPLI	Query Match Best Local Similarity 100.0%; Pred. No. 2.66-162; Length 24923; Matches 328; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  Qy 522 AGTGACAGAACGCCAGACCTTCCAGCCCTGAGAGAGGCTCAGCAACAACGTGGAAGA 581  Db 24596 AGTGACAGAACGCCAGACCTTCCTGTCCTGGCCTGAGAGAGGCTCAGCAACAACGTGGAAGA 641  Qy 582 GCTCCTACAATCCTCCTTGTCCCTGGAGGCCAGAGCACAACGACAACGAGA 641  Db 24656 GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGAGCACAACGAGGA 641  Qy 642 GCAAGGAGTGGAGCACAGGCAGGAGCACAAGCAGGAAGAACACAAGCAGGA 641  Db 24716 GCAAGGAGTGGAGCACAGGCAGGAGCACAAGCAGGAAGAACACAAGCAGGA 701  Qy 702 ACAGGAAGAGCACAGGCAGGAGCCCCACACAAACAAGCAGGAAACACAAGCAGGAA 701  Qy 703 CACGGAAGAGCACAGGCAGGAGCCCCACACAAACACAAGCAGGAAACACAAGCAGGAAGAGCAGAAGCAGAAACACAAGCAGGAACACAAGCAGGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG
	Qy Db Dy Db Search comp Job time:

.

,	DЬ	δδ	Дb	γQ	90	ş
,	Db 426 CTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAG 474		Db 366 CCTGCAGCTGCCCCACAGAGAGAGGCCTTTCTTTCTTTTTTTT	Ţ		OY 936 TGAAATGAAATATATGATGAGGAACTCCTTACTCCTTCCT
	GGAGGAG 1104         GGAGGAG 474	TTCGATCGTGGÁGÁÁTÁC 425	TTCGATCGTGGAGAATAC 105	ACCAMAMCCCTGGCAGCCT 365	ACCAAAACCCTGGCAGCTT 995	
			UI			

Search completed: March 8, 2005, 06:25:49 Job time: 2091 secs

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                         a a
                                                                                                                                                                                                                                                                                                  a a
                                                                                                                                                                                                                                                                                                                                                                                                                              000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
             222222221111111110
22222211115111110
265432109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-559-013E-23
1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Issued_Patents_NA:*

| (cgn2_6/ptodata/1/ina/5A_COMB.seq:*
| (cgn2_6/ptodata/1/ina/5B_COMB.seq:*
| (cgn2_6/ptodata/1/ina/6A_COMB.seq:*
| (cgn2_6/ptodata/1/ina/6B_COMB.seq:*
| (cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
| (cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
| (cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gttagaggcggcttgtgtcc.....tgttgatcttcaaaaaaaa 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7, 2005, 08:49:26; Search time 338 Seconds (without alignments) 9173.800 Million cell updates/sec
        316
7218
51259
51259
512695
112695
112695
112695
112695
112696
112696
112696
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
110596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
    US-09-621-976-3396
US-08-232-463-14
US-08-232-463-14
US-08-181-821-209
US-09-618-166-208
US-09-618-166-208
US-09-9410-399-3
US-09-9410-399-3
US-09-9410-399-3
US-09-9130-1114-1
US-09-130-114-1
US-09-130-115-1
US-09-130-144-15
US-09-140-188-15
US-08-194-088B-15
US-08-194-088B-15
US-08-194-088B-15
US-08-194-088B-15
US-08-194-088B-15
US-09-471-669A-48
US-09-480-399-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mode1
Sequence 3396, Ap
Sequence 14, Appl
Sequence 209, App
Sequence 208, App
Sequence 208, App
Sequence 208, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 11, Appli
Sequence 15, Appl
Sequence 16, Appl
Sequence 17, Appli
Sequence 18, Appl
Sequence 18, Appl
Sequence 19, Appli
Sequence 11, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
```

ი	ი	a	ი	ი			a	ი						a	a	Q	Ω
45	44	43	42	41	40	39	38	37	9	ω 5	34	ω ω	32	31	30	29	28
59.6	59.6	60	60.4	61.2	61.8	61.8	63.8	64.4	66	66	66.8	66.8	66.8	67.8	68.6	68.6	68.6
3.1	3.1	3.2	3.2	3.2	3.3	ω. •	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6
96340	601	18798	247781	601	289	289	85850	72549	194937	194937	2301	2301	2301	816	32207	32207	32207
4.	4	4	4	4	w	w	4.	4.	4.	4	υı	4	μ	4.	ω	w	N
US-09-949-016-15863	US-09-949-016-90372	US-09-949-016-14339	US-09-949-016-14193	US-09-949-016-90371	US-09-244-796-17	US-09-007-005-17	US-09-949-016-13424	US-09-949-016-16477	US-09-949-016-17033	US-09-949-016-17032	PCT-US93-06251-78	US-09-167-206-3	US-08-306-691B-23	US-09-248-796A-6947	US-09-230-371A-20	US-08-757-669A-20	US-08-770-379-20
Sequence 15863, A	Sequence 90372, A	Sequence 14339, A	Sequence 14193, A	Sequence 90371, A	<ul> <li>Sequence 17, Appl</li> </ul>	Sequence 17, Appl	Sequence 13424, A	Sequence 16477, A	Sequence 17033, A	Sequence 17032, A	Sequence 78, Appl	Sequence 3, Appli	Sequence 23, Appl	Sequence 6947, Ap	Sequence 20, Appl	Sequence 20, Appl	Sequence 20, Appl

## ALIGNMENTS

and Encoded Human Proteins

US-09-621-976-3396

```
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 66..311
; NAME/KEY: misc_feature
; LOCATION: 301
; OTHER INFORMATION: n=a, 9
US-09-621-976-3396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3396, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Dobert, S.
APPLICANT: Jobert, S.
APPLICANT: Jobert, S.
TITLE OF INVENTION: ESTS and Encoded Human P.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 3396
LENGTH: 316
TYPE: DNA
ORGANISM: Homo sapiens
                        S
                                                             밁
                                                                                           Ś
                                                                                                                                밁
                                                                                                                                                      S
                                                                                                                                                                                               밁
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 291; Conserv
                                                             195
                                                                                                                                135
                                                                                             181
                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                  291; Conservative
                                                                                                                                                                                               78
                                                                                                                                                                                                                  61 GCCGCTGGCTTCCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                  18 GTTAGASGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                   1 GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                   GCCGCTGG--TTCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGG-ACCTGCCGMA
                 ACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                              CGCTTCTTCGCACTGCTGAACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                ACCCACGGSTGCCGGAATCCCASACTCGTCCAGCTGGACCAATATGANAACCASGGCTTA
                                                                                                                                                                                                                                                                                                                               13.7%; Score 258.8; DB 4
96.0%; Pred. No. 2.8e-64;
tive 5; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                    DB 4;
                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                  120
                                                             253
                                                                                              240
                                                                                                                                194
                                                                                                                                                                                               134
                                                                                                                                                                                                                                                                   77
                                                                                                                                                                                                                                                                                                   60
```

밁 Ş

```
Вb
                                                                                                                                                                        밁
                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Marches 23; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong strong 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: pTZgpt-F1s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 14, Application Patent No. 5670367
GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·08-232-463-14/c
                                                                                                                                                                                               793 CAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTT 852
                                                                                                                                                                                                                                                                                             733 GAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAAGGCTGTGTCTCAGCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1800
CITY: Alexandria
STATE: VA
                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road,
                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
COUNTRY: USA
7TD: 22313-0299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: DURING. SCHEIFLINGER, F. G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 GTG
|||
314 GTG
                                                                                                                                                                                                                                                                                                                                                                                                            4.0%; Score 75.2; DB 1; Length 7218; Conservative 239; Mismatches 152; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1, Application US/08232463
5670367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INVENTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FALKNER, F. G.
VENTION: RECOMBINANT FOWLPOX VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30472/114 IMMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                      ,0
```

```
Ś
                                                                            밁
                                                                                               Ş
                                                                                                                          ₽
                                                                                                                                            Ş
                                                                                                                                                                                                             US-08-781-891-209
                                                                                                                                                         Query Match
3.9
Best Local Similarity 61.0
Matches 119; Conservative
                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/781,891
FILING DATE: 27-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: No. 609620tenburg Ph.D., Carol
PREGISTRATION NUMBER: 39,317
DESPREENCE/NOCKET NUMBER: 39,317
                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 209: SEQUENCE CHARACTERISTICS: LENGTH: 51259 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
US-08-781-891-209/c
/ Sequence 209, Application US/08781891
**Part No. 6090620
***TON:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 24:
TELECOMMUNICATION INFORMATION: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: SCATTLE SCATTE: Seattle TWATE: Washington
                                                                                                                                                                                                                           TOPOLOGY:
                 734 AGGGAAAGCAQGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGC 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: YU, Chang-En
APPLICANT: Oshima, Junko
APPLICANT: Oshima, Junko
APPLICANT: Mulligan, John T.
APPLICANT: Schellenberg, Gerald D.
TITLE OF INVENTION: GENE APPLICANT
TITLE OF INVENTION: GENE FRODUCTS RELATED TO
                                                                 ADDRESSEE:
f: 51259 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    973 AGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGAGGCCTTGCTG 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    913 ATTCGATCAGCCCAGGAAATAGATGAAATGAATGAATATATGATGAGAACTCCTACTGG 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853 GCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTC 912
                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: SEED and BERRY LLP
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                            3.9%; Score 73.4; DB 3; Length 51259; 61.0%; Pred. No. 1.4e-09; ative 0; Mismatches 76; Indels 0;
                                                                                                                                        0,
```

794 AGACAGACTCAGAGC 808

```
S
                                                                                                                   B
                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                          ; SEQUENCE DESCRIPTION: SEQ ID US-09-618-166-209
                         Ś
                                                          밁
                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-618-166-209/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 209, Application US/09618166
Patent No. 6583112
GENERAL INFORMATION:
                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (206) 622-
TELEFAX: (206) 682-60
INFORMATION FOR SEQ ID NO: 209
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/618,166
FILING DATE: 17-U1-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 240052.419C1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Fu,
                                                                                                                                                       674
                                                                                                                                                                                                                 614
                                                                                                                      201
                           794
                                                                                                                                                                                                                                                119;
81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81 AGGAGGAGCAGGAGC
                                                                                                                      AGACAGACTCAGAGC 808
                                                                                      AGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGAGGCTGTGTCTCAGCTGC
                                                                                                                                                                                 AGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGCAGGAGCACAGGCAGGAGCCGACAC
AGGAGGAGCAGGAGC
                                                          STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 51259 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 701 Fifth Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                             3.9%;
ilarity 61.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schellenberg, Gerald D.
VENTION: GENE AND GENE PRODUCTS RELATED
WERNER'S SYNDROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mulligan, John T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yu, Chang-En
Oshima, Junko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ying-Hui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seed Intellectual Property Law Group
1 Fifth Avenue, Suite 6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                    682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     209
                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                           Score 73.4; DB 4; Length 51259; Pred. No. 1.4e-09;
                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                           NO: 209:
                                                                                                                                                                                                                                              76;
                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                             Gaps
                                                          82
                                                                                                                    142
                                                                                       793
                                                                                                                                                  733
                                                                                                                                                                                  202
                                                                                                                                                                                                               673
```

RESULT 5

US-09-618-166-208/c

Sequence 208, Applicat Patent No. 6583112 GENERAL INFORMATION:

Application US/09618166

APPLICANT:

Fu, Ying-Hui Yu, Chang-En Oshima, Junko Mulligan, John T.

```
밁
                          Ś
                                                           밁
                                                                                   5
                                                                                                                    멼
                                                                                                                                                 Ś
                                                                                                                                                                                밁
                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                      US-08-781-891-208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-781-891-208/c
                                                                                                                                                                                                                                           Matches 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 208, Applica Patent No. 6090620 GENERAL INFORMATION:
                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 24
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: No. 6090620tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version CUREDT APPLICATION DATA: APPLICATION UNMEBER: US/08/781,891 FILING DATE: 27-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Mulligan, John T.
APPLICANT: Schellenberg, Gerald D.
TITLE OF INVENTION: GENE AND GENE PRODUCTS RELATED
TITLE OF INVENTION: WERNER'S SYNDROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                LENGTH: 16442 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Seattle
                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
16202 GTAGAAGGAGA 16192
                                                           16262
                                                                                                                      16322
                                                                                                                                                                                726
                                                                                                                                                    98104-7092
                            TCAGCTGCAGA 796
                                                           GGAAGAGGAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGAGGCTGTGTC 785
                                                                                                                      Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6300 Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08781891
                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yu, Chang-En
Oshima, Junko
                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEED and BERRY LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ying-Hui
                                                                                                                                                                                                                                                         3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center,
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         240052.419
                                                                                                                                                                                                                                         Score 72.6; DB 3;
Pred. No. 1.3e-09;
0; Mismatches 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1.30
                                                                                                                                                                                                                                                                     Length 16442;
                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                           Gaps
                                                                                                                      16263
                                                                                                                                                                                16323
                                                                                                                                                                                                             665
```

```
RESULT 7
US-09-949-016-16775/c
                                                                                                                                                                                                                 Sequence 16
Patent No.
            APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
FILE REFERENCE: CLOO1307
CURRENT APPLICATION NUMBER: US/09/949,016
PRIOR APPLICATION NUMBER: 02/00-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
US-09-618-166-208 DESCRIPTION: SEQ ID NO: 208:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
3.8%; Score 72.6; DB 4; Length 16442;
Best Local Similarity 61.3%; Pred. No. 1.3e-09;
Matches 117; Conservative 0; Mismatches 74; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.

APPLICATION DATA:
APPLICATION DATA:
FILING DATE: 17-Jul-2000
ATTORNEY/AGENT INFORMATION:
NAME: MCMasters, David D.
REGISTRATION NUMBER: 33,963
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 240052.419C1
TELEPHONE: (206) 622-4900
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (206) 622-4
TELEFAX: (206) 682-60:
INFORMATION FOR SEQ ID NO: 208:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                              16202 GTAGAAGGAGA 16192
                                                                                                                                                                                                                                                                                                                                 16382 GGAGGAGCAGGAGCÁGGAGCAGGÁGGAGCÁGGAGCÁGGAGCAGGAGGAGGAGGAGGAGGAGGA
                                                                                                                                                                                                                                                                                                                         786 TCĄGCTGCĄGĄ 796
                                                                                                                                                                                                                                                                                                                                                                                                               16775, Application US/09949016
D. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group STREET: 701 Fifth Avenue, Suite 6300 STATE: Washington COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                      GGAAGAGGGAGGAAGGAAGGACAGGGGGACTAAGGAGGGACGGGAGGCTGTGTC 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 16442 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Schellenberg, Gerald D.
OF INVENTION: GENE AND GENE PRODUCTS RELATED TO
REQUENCES: 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                    문
                                                               Ś
                                                                                               밁
                                                                                                                      Ş
                                                                                                                                                      Б
                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-249-585A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-16775
                                                                                                                                                                                                                                                                                                                             FEATURE:
793 CAGACAGA 800
           497 CÁGAGGGGCÁGGAGGAGGAGGAGGAGCAGGÁGGAGGAGGGGGCAGGAGGAGGAG
                                 733 GAGGGAAAGCAGGAAGAAGGACAGGGACTAAGGAGGGACGGGAGGGCTGTGTCTCAGCTG 792
                                                                  743
```

Ś 밁

732

Ś 밁 Ś 밁 ş

```
Sequence 2, Application US/0924958A
Patent No. 6417002
GENERAL INFORMATION:
APPLICANT: Horlick, Robert
TITLE OF INVERTION: METHOD FOR MAINTENANCE AND SELECTION OF EPISOMES
CURRENT APPLICATION UNUMBER: US/09/249,585A
CURRENT FILING DATE: 199-02-11
NUMBER OF SEQ ID NOS: 18
SOFTWARE: Patentin version 3.0
LENGTH: 1926
TYPE: DNA
                                                                                                      NAME KEY: CDS

NAME KEY: CDS

LOCATION: (1)..(1926)

OTHER INFORMATION: coding strand of EBNA-1 DNA

US-09-249-585A-2
                                                            Query Match
Best Local Similarity 61.2%;
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 137; Conserva
                                                                                                                                                                    ORGANISM: Epstein Barr Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 12695
9499 AGGAG 9495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9619 ÁGGÁRGAGGÁGGAGGÁAGGÁAGGÁGGÁGGÁGGÁGGÁGGÁGGÁAGGÁAGGÁAGGÁAGGÁGGAGGÁGG
                                                                                                                                                                                                                                                                                                                                                                                                               803 CAGAG 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9739 TCAGTÁGAÁGCCAGGCCAGGACACTCCÁCTAGGCTGAGGAGGAGGAÁGAGGAGGÁGGÁGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563 ТСАБСЛАСЛАСОТБЕВАЛЕВЕСТСЕТАСЛАТССТЕСТТЕТСССТЕВЕВЕССАБЕВАССЛАБЕ 622
                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.8%;
                                                      Score 71.2; DB 3;
Pred. No. 9.2e-10;
0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 72.2; DB 4;
Pred. No. 1.4e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches 108;
                                                                           Length 1926;
                                                      Indels '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 12695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                   ۰,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  o
;
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; SEQ ID NO 3
, LENGTH: 1926
; TYPE: DNA
; ORGANISM: Epstein-Barr virus
US-09-410-399-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-050-863-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 9
US-09-410-399-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.8%; sest Local Similarity 61.2%; Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Robertson, Erle S.
APPLICANT: Robertson, Erle S.
APPLICANT: Cotter, Murray A.
TITLE OF INVENTION: Methods to Inhibit or Enhance the Binding of Viral DNA
TITLE OF INVENTION: to Genomic Host DNA
FILE REFERENCE: UM-03778
CURRENT APPLICATION NUMBER: US/09/410,399
CURRENT FILING DATE: 1999-10-01
NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09050863
Patent No. 6114111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/09410399 Patent No. 6482587
                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Lao, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                                                      COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                     APPLICANT: Hiang, Betty
APPLICANT: Payan, Don
TITLE OF INVENTION: Mammalian Protein Interaction Cloning
TITLE OF INVENTION: System
TTORNEY/AGENT INFORMATION:
                               APPLICATION NUMBER: US/0
FILING DATE: 30-MAR-1998
                                                                                                                                                                                                                             CITY: San Francisco
                  CLASSIFICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                733 GAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGAGGA 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACAGA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||| || CAGGAGGA 564
                                                                                                                                                                                                               Ç
                                                                                                                                                                                                                                                                                                                                                                                          Lao, Ying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ver. 2.0
                                                  US/09/050,863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 71.2; DB 4; Lengtn 1:
Pred. No. 9.2e-10;
0; Mismatches 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1926;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; MOLECULE TYPE:
US-09-050-863-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-359-081-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09359081
Patent No. 6316223
GENERAL INFORMATION:
APPLICANT: Lao, Ying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 949-8711 INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781_1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
              NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-65638/DJB/RMS
TELECOMMUNICATION INFORWATION:
TELEPHONE: (415) 781-1989
                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/050,863
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                               ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Mammalian Protein Interaction Cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      940 CAGGAGGA 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        733 GAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #: 2580 base pairs
    nucleic acid
DEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACAGA 800
                                                                                                                                                                      APPLICATION NUMBER: US/09/359,081
FILING DATE: 22-Jul-1999
CLASSIFICATION: Unknown>
                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                           STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                         CITY: San Francisco
TELEFAX: (415) 949-8711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hiang, Betty
Payan, Don
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.8%; Score 71.2; DB 3; 61.2%; Pred. No. 1.1e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  System
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A-65638/DJB/RMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                              Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

0

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Horlick, Robert A.
APPLICANT: Damaj, Bassam B.
APPLICANT: Robbins, Alan K.
TITLE OF INVENTION: Eukaryotic Cells Stably Expressing Gen
TITLE OF INVENTION: Eukaryotic Transfected Episomes
CURRENT APPLICATION NUMBER: US/09/130,114
CURRENT FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 5452
TYPE: DNA
ORGANISM: VEBNA
US-09-130-114-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-09-130-114-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.8%;
Best Local Similarity 61.2%;
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-359-081-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09130114
Patent No. 5976807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2580 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
STRANDEDNESS: unknown
MOLECULE TYPE: DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                 1925 CÁGGAGGGGCÁGGÁGGAGGAGGÁGGAGGAGGAGGAGGAGGAGGAGGGGCÁGGAG 1866
                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                           733 GAGGGAAAAGCAGGAAGAACAAGGACTAAGGAGGGACGGAACGGCAGCTGTGTCTCAGCTG 792
                                                                                                                                                                                                                                                                                          673 CAAGAACACAAGCAGGAAGAGGGCCAGAAACAGGAAGAGAGGAAGAGGAACAGGAACAGGAAGAG 732
                                                                                                                                                                                                                                                                                                                                                                                                                                        613 САСБАССА СОСТОВНОСТВИТЕЛЬНО В СОСТОВНОЕ В СОСТОВНО
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 940 CAGGAGGA 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               793 CAGACAGA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             733 GAGGGAAAAGCAGGAAGAAGGACAAGGGACTAAGGAGGGACGGGAAGGCTGTGTCTCAAGCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     820 akodogókagakáckádákadákádádákagagáckádákádákadákádágádákádagákagagá
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      673
CAGGAGGA 1858
                                                                 CAGACAGA 800
                                                                                                                                                                                                                                    CÁGGAGGGGCÁGGAGCAGGAGGAGGAGGAGGAGGAGGGGCAGGAGGGGGCÁGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 71.2; DB 2; Length 5452;
Pred. No. 1.7e-09;
0; Mismatches 73; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 71.2; DB 3;
Pred. No. 1.1e-09;
0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732
```

뭥 Ś 밁 Ş g Ś

1218.002

```
GENERAL INFORMATION:

APPLICANT: Ruffner, Duane E.

APPLICANT: Pierce, Michael L.

APPLICANT: Pierce, Michael L.

APPLICANT: Chen, Zhidong

ITILE OF INVENTION: Directed Antisense Libraries

FILE REFERENCE: T6678.PCT.US

CURRENT APPLICATION NUMBER: US/09/647,344A.

CURRENT FILING DATE: 2000-12-04

PRIOR APPLICATION NUMBER: PCT/US99/06742

NUMBER OF SEQ ID NOS: 50

LENGTH: 8705

TYPE: DNA

COLUMNATION. MILESTERMAN.

LENGTH: 8705

TYPE: DNA

COLUMNATION. MILESTERMAN.

LENGTH: 8705

TYPE: DNA

COLUMNATION. MILESTERMAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-910-647-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                     COUNTRY: U.S.A.

ZIP: 94608-2916
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,647
FILING DATE:
CLASSIFICATION: 514
ATTORNEY ACCESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: pshuttle US-09-647-344A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/08910647 Patent No. 6251433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
US-09-647-344A-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.8%;
Best Local Similarity 61.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14, Application US/09647344A
Patent No. 6586180
                                        ATTORNEY/AGENT INFORMATION:
NAME: Fujita, Sharon M.
                                                                                                                                                                                                                                                            STREET: 45001
STREET: Emeryville
CITY: Emeryville
CTATE: California
TI S.A.
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Zuckermann et al.
TITLE OF INVENTION: Compositions and Methods
TITLE OF INVENTION: Polynucleotide Delivery
                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                NAME: Fujita, Sharon M.
REGISTRATION NUMBER: 38
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7850 GÄGGGGCAGGAGCAĞĞAGĞAĞĞĞCAĞĞAĞGGGCAĞGAĞCAĞGAĞGAĞGAĞGAĞCAĞĞAĞĞĞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     733 GAGGGAAAAGCAAGAAAGAACAAGGACAAGGGAACGGAAGGCAAGGCTGTGTCTCAAGCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              793 CAGACAGA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGAGGA 7723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4560 Horton Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĊĀĠĠĀĠĠĀĠĠĠĠĊŖĠĠĀĠĊĀĠĠĀĠĠĀĠĠĠĊĀĠĠŖŖĠĠĠĊĀĠĠĀĠĠĊĀĠĠĀĠĊŖĠĠŖ
                                                                                                                                                                                                                                                                                                                                   Chiron Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 71.2; DB 4; Length 8 Pred. No. 2.2e-09; 0; Mismatches 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 8705;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7791
```

```
RESULT 15
US-09-620-925-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-910-647-1
                                              APPLICATION NUMBER: 08/910,647
FILING DATE: *UNKNOWN'>
ATTORNEY/AGERT INFORMATION:
NAME: Fujita, Sharon M.
REGISTRATION NUMBER: 38,459
REFERENCE/DOCKET NUMBER: 1218.002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (510) 923-2706
TELEPHONE: (510) 655-3542
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (510) 923-2706
TELEPAX: (510) 655-3542
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 9600 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09620925
Patent No. 6468986
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.8%;
Best Local Similarity 61.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                            ZIP: 94608-2916

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: 1BM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/620,925

FILING DATE: 21-Uul-2000

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Chiron Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Zuckermann et al.
TITLE OF INVENTION: Compositions and Methods for
Polynucleotide Delivery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              793 CAGACAGA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733 GAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGAGGA 993
                LENGTH: 9600 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 4560 Horton Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Emeryville
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 71.2; DI Pred. No. 2.3e. 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.3e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 3; Length 9600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
TOPOLOGY: linear
;
MOLECULE TYPE: DNA (genomic)
;
SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-620-925-1
                    Ś
                                               밁
                                                                     Ś
                                                                                                뮍
                                                                                                                                                 밁
유
                                                                                                                       Ś
                                                                                                                                                                        á
                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                       613 CAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAGAGGAGCACAGGAGCCGACA 672
986
                                                                                                                 793 CAGACAGA 800
                                                733 GAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTG 792
                                                                                                  806 CAGGAGGAGGGCAGGAGCAGGAGGGGGCAGGAGGGGGCAGGAGCAGGAG 865
CAGGAGGA 993
                                                                                                                                                                                                 3.8%;
ilarity 61.2%;
Conservative
                                                                                                                                                                                                   0;
                                                                                                                                                                                                   Score 71.2; DB 3;
Pred. No. 2.3e-09;
0; Mismatches 73;
                                                                                                                                                                                                                                                                   <u>..</u>
                                                                                                                                                                                                                          Length 9600;
                                                                                                                                                                                                   Indels
                                                                                                                                                                                                   <u>,,</u>
                                                                                                                                                                                                 Gaps
                                                                                                                         732
```

Search completed: March 7, 2005, 17:40:15 Job time : 340 secs

WASH WHALE FOR A SIHT

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                              ÷ 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
     937
479.2
433.8
408.4
339
337.2
329.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0
99.7
99.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4390206 seqs, 2959870667 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        March 7, 2005, 08:22:56; Search time 1053 Seconds (without alignments) 10653.286 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10:
11:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N_Geneseq_16Dec04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-559-013E-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gttagaggcggcttgtgtcc.....tgttgatcttcaaaaaaaa 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn2000s:*
geneseqn2001as:*
geneseqn2001bs:*
geneseqn2002bs:*
geneseqn2003bs:*
geneseqn2003bs:*
geneseqn2003bs:*
geneseqn2003cs:*
:
geneseqn2004as:*
:geneseqn2004as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
        11895
11896
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
1189
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
1189
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
1189
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
11899
1189
11899
11899
11899
1189
1189
1189
1189
1189
1189
1189
1189
1189
1
                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                 ∞ ν ν ∞ ω σ
                               ADA39940
ADD735783
ADD37623
ADA56130
ADA56130
ADA45034
AAH99858
ADO24565
AAX971906
AAX971906
AAX97339
ADQ53839
ACH27630
ACH27630
ACH27630
ACH27630
ACH27630
ACH27630
ACH277630
                                                                                                                                                                                                                                                                                                                                                                                                                     AAX06785
AAZ24890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD08658
AAZ50927
ABT14679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8780412
Aad08658 Human can
Aaz50927 Human ro
Abt14679 Human ran
Aax06785 Human adu
Aaz24890 Human sec
Ada39940 Human sec
Add3940 Human sec
Add37523 Human sec
Add47523 Human sec
Add450130 Gene enco
Add450130 Gene enco
Add450140 Human pro
Ado24565 Human pro
Ado24565 Human pro
Ado24565 Human sec
Aax97739 Extended
Adg53839 Novel can
Ach27630 Human adu
Ach49259 Human ful
Abz71705 Human can
Abz71705 Human can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
```

	ი	a	ი		ი	ი	ი	ი								C	ი		ი	a				
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	72.6	73.4	74	75.6	81.2	124.4	126.6	199	282.4
3.8	<u>ن</u> 8	3.8	3.8	з. 8	3.8	3. 8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.9	4.0	4.3	6.6	6.7	10.5	14.9
10380	10330	10285	10285	9600								1926		1925	799		51259	628		30	128	370	199	308
Ŋ	12	9	σ	N	12	12	N	N	σ	ω	10	4.	w	N	N	N	N	12	11	12	Ŋ	6	8	N
AAZ22248	ADL67154	ABS66453	ABS71027	AAV21683	ADP64415	ADM10659	AAZ23778	AAX90923	AAI64275	AAA75454	ADK65580	AAF82902	AAA50254	AAX90924	AAV55831	AAX83006	AAX83007	ACH89664	ACN44712	ADQ97654	AAX51481	ABS69017	ABZ19225	AAV88163
Aaz22248 Nucleotid	Adl67154 Plasmid p	Abs66453 Plasmid p	Abs71027 pCEP-Xa-F	Aav21683 Vector pl	Adp64415 Vector pC	Adm10659 Expressio	Aaz23778 Vector ps	Aax90923 Anti-sens	Aai64275 Epstein-B	Aaa75454 Nucleotid	Adk65580 Human her	Aaf82902 EBV tethe	Aaa50254 Epstein B	Aax90924 Epstein B	Aav55831 Nucleotid	Aax83006 Partial m	Aax83007 Partial m	Ach89664 Human gen	Acn44712 Mouse gen	Adq97654 Mouse can	Aax51481 Human sec	Abs69017 Novel mur	Abz19225 Group III	Aav88163 EST clone

## ALIGNMENTS

÷

8	€ P ≥		177	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 7 7 ;	7 7 7 ;	7777	1777	FI	2 S X	<b>22</b>	¥ 🖁 🕃	<b>4</b>	<b>883</b>	RESU AADO ID
07-JUN-2001.	WO200140271-A2.	polyA_signal 1	primer_bind 1	primer_bind 1	primer_bind 9	primer_bind 8	primer_bind c	primer_bind 2	Key I	Homo sapiens.	Human; OY-TES-1; cancer associated	Human cancer asso	04-SEP-2001 (first	AAD08658;	RESULT 1 AAD08658 ID AAD08658 standard
		bound moiety= "ht-5 (anti-sense) primer" 18691874 *tag= h	;.'a	/bound_moiety= "GSP1-T1 primer" 13331352 *thag= f	91_	/bound_moiety= "ht-5 (sense) primer" 	ă۱٦	22.0	Location/Qualifiers 491680		$\ensuremath{\text{OY-TES-1}}\xspace_i$ cytostatic; gene therapy; vaccine; fibrosarcoma cancer; associated antigen; ss.	associated antigen OY-TES-1 cDNA.	est entry)		standard; cDNA; 1895 BP.

```
Query Match
Best Local Similarity
Matches 1895; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to cancer associated antigens and their nucleic acids which are expressed in methylcholanthrene-induced fibrosarcoma nice. Cancer cells from mice. Cancer associated antigens and a pharmaceutical antigens are used to treat a condition e.g. cancer. Cancer associated antigens the nucleotides encoding them, antibodies against them and the pharmaceutical compositions comprising them are useful for diagnosing, monitoring and treating the diseases characterised by the expression of research purposes. Cancer associated antigens, e.g. fibrosarcoma cancer, and for therapy. The present sequence is a cDNA encoding human cancer associated antigen Oy-TES-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1895 BP; 449 A; 565 C; 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 56; Fig 2; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ono
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolated polypeptide, useful in encoded by a nucleic acid (NA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-1999; 99US-0168353P.
26-APR-2000; 2000US-00559013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-DEC-2000; 2000WO-US032750.
                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-397941/42.
DB; AAE04382.
                                                                                                                                      TCACCCACCACGATGACCTCCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                    CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cá drica cracia de contra contra contra contra contra contra de contra c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĠŦĠĊĊĊĠĂŤĠĠŤĠĊŤĠŤĊŤĠĊŤĊĊĂĂĊĊŤĊĊĊŤŦĂŤĠĊĊŤĊĊŤĠĠŤŤŤĠĂĠŦĊŤŤŤĊŤĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a ce a ce de ce de la cerció de la cerció de cerció de cerció de cerció de cerció de la cerció del la cerció del la cerció del la cerció de la cerció del la cerció de la cerció de la cerció del 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĊĠĊŦŦĊŦŤĊĠĊĀĊŦĠĊŦĠĀĊŦĊĊĀĀĊĊŦĠĠĀĀĠĠĊĀĠĀĠĀĊŢĀĊĊŦĠĊĊĠŦĊŦĊĊĠŦĠĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCGGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             deckaddatricdaercaddececaerecaddececererererere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĠĊĠĠĊŦĠĠĊŦŦĊĊŦŦĊĊĊŦĊĂĊŦĊĊŦĠĀĀĠĠŦĠĊŦĠĊŦĠĊĊŦĠĊĊŦĊĸĠĠĸĀĊĊŦĠĊĊĠĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĠŦŦĀĠĀĠĠĊĠĠĊŦŦĠŦĠŦĊĊĀĊĠĠĠĀĊĠĠĠĠĠĠĠĠĀŦĊŦŦĊŢĊĊĠĠĊĊĀŦĠĀĠĠĀĀĠĊĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nakayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LUDWIG INST CANCER RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 1895; I
100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in treating disorders such

A) Group 3 or 4 molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer,
                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                Ş
                                                                                                                                                                       밁
                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                1621
                                                                                                                                                                                                                                                             1561
                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                 TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                             CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĊŤŦĀĠĊŤŤĊĊĀĠĠĀŤĠĠĠĠĀŤŤŤĊĊĊŦĀĊĊĀĀĠĀŤŤŤĠŤĠĀĊĀĊĀĠĀĊŤĀŤĀŤĊĊĀĠŤĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcaggicegerritateggicigaritagiaeggiceggiceggicategaritagice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĠŦĊŔĠĊĊĊĊŦŶĠĊŦŔĠĊĊŔĊĊŔĠŔĠĊĊŤĠŦĊĊŔŦĊĠĠĊŔŔĊĊŔĠĠŦŔĠĠĠŦĊĊĊĊŔĠŔŔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTTCCCACAAGACTCCCTTT 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dededededaciáciá retrete en de construcción de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTGGAAGTACATGGAGGAGAGATCCTTGGTTTCGGGAAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrecreserscierarios arrestadas de la recrescio de la recrescio de la recresers de la recresers de la recresers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATCATAACCCGCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a a crecta cresa da da a a como de com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCAGGAGCTCATTCGATCAGCCCAGGAAATGAATGAAATGAAATGAATATGATGATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cerrecritificacececes against a construction of the contraction of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTCTCAGCTGCAGACAGAGTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĠĀĀĊĀĠĠĀĀĠĀĠĠĠĠĀĀĀĠĊĀĠĠĀĀĠĀĀĠĀĀĠĠĀĊĠĠĠĠĀĊŢĀĀĠĠĀĠĠĠĀĊĠĠĀĠĠĊŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           recereded a de constant de la consta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                  1620
                                                                                                                                                                                                                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
```

Ś

8 Ś В Ş 밁 Ś B Ś 밁 Ś 밁 8 밁 δ 밁

```
RESULT 2
AAZ50927
ID AAZ5
XX A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                      Bandman O,
Corley NC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protease and associated protein-10; PPRG-10; anti-PPRG antibody; diagnosis; treatment; cell proliferative disorder; cancer; cirrhosis; arteriosclerosis; sursitis; hepatitis; immune disorder; AIDS; Addison's disease; adult respiratory distress syndrome; allergy; ankylosing spondylitis; amyloidosis; cytostatic; antiarteriosclerotic; hepatototropic; antiaflammatory; virucide; antisporiatic; anti-HIV; antiallergic; immunosuppressive; antidiabetic; antianaemic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Protease and associated protein-10 (PPRG-10) encoding cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ50927;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ50927 standard; cDNA;
                                                                                                                                                                                                                              10-AUG-1998;
11-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     neuroprotective; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUN-2000
New human proteases,
                                                                                                                                                                                       (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                           06-AUG-1999;
                                                                                                                                                                                                                                                                                                                                    24-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                             WO200009709-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1681
                                             2000-224346/19.
DB; AAY70016.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACTTTACATAAAATGTTGATCTTCAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGACTTTACATAAAATGTTGATCTTCAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                       ř
                                                                                                     Hillman
Yue H,
Lu DAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                              98US-0096114P
99US-0119768P
                                                                                                                                                                                                                                                                                           99WO-US017818
                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= c
/product= "Mature
1190. .1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= b
140. .1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers 65. .1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "Human
65. .139
                                                                                                                                                                                                                                                                                                                                                                                                                  bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                       *tag=
                                                                                                                           Tang
  useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1912
                                                                                                                           Baughn MR,
YT, Reddy
for diagnosis, treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                    "Probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPRG-10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPRG-10"
                                                                                                                           ø
                                                                                                                                            Azimzai Y,
                                                                                                                                                                                                                                                                                                                                                                                                                    or Primer"
                                                                                                                         Patterson C, Au-
                                                                                                                         Au-Young
                                                                                                                                            ξ
  of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1800
                                                            밁
                                                                                            S
                                                                                                                                            밁
                                                                                                                                                                            S
                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FXSXSSSSSSSSSSSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is a cDNA identified in Incyte clone 139301 derived from THYRNOT03 cDNA library. It encodes human protease and associated protein-10 (PPRG-10), which is expressed in reproductive, endocrine, haematopoietic and immune tissues. Anti-PPRG antibodies can be used as therapeutic antagonists, respents for diagnosis and monitoring diseases and for isolating PPRG. PPRG uncleotide sequence can be used as grobe or primer for diagnosis and monitoring of PPRG-related diseases and gene mapping. PPRG can be used in the treatment of cell proliferative disorders like cancer, arteriosclerosis, atherosclerosis, burstitis, cirrhosis and hepatitis, and immune disorders like ALDS, Addison's disease, adult respiratory distress syndrome, allergies, ankylosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                spondylitis and amyloidosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cell proliferative disorders such as
                                                              677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                317
                                                                                                   661
                                                                                                                                            617
                                                                                                                                                                                   601
                                                                                                                                                                                                                          557
                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                              497
                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                              437
                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                    TCCCTGGGAGGCCAGGAGCAAGCCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                        CAGTTCACTCACCGTTGCTCCAACCACGTCTACTATGCCAACAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGCCCGATGGTGCTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCGCTGGCTTCCCTCCACTCCTGAAGGTGCTGCTCCTGCCTCTTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTAGAGGCGGCTTGTGTCCACGGGACGCCGGGCGGATCTTCTCCCGGCCATGAGGAAGCCA
                       GAACAGGAAGAGGAAGGAAGCAGGAAGAAGAAGGACTAAGGAGGGACGGAAGGCT
                                                                                                   TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                   TCACCCACCACGATGACCTCCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCGCTGGCTTCCCTTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1912 BP; 455 A; 567 C; 487 G; 403 T; 0 U; 0 Other;
                                                              TCCCTGGGAGGCAAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                              TCACCCACCACGATGACCTCCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  erecceareererererectecaacerecerrarecerecerereaererreaererrecee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1890.2;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       u
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

196 180 136 120 76 60 0

780

```
TTGGGTTGGAGCAACAGTCCCAGAGAGGGGCCACGGTGGGAGCTGCGCCCCCTTAAAAGA
                                                                                                                                                                                                                                                                                           ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                       accceatrigerricas series escribisticas de la construcción de la constr
                                                                                                                                                                                                                                                                                                                                                                                              ĠĊŤĠĠĊĠŤĊĨŔĸŤĊſĬĠĊĊĊŔĊŔĊĊĊĊŔĠĊĊĊŔĠĊĊŔĠĊĠĊŔĊĠŤŢĊŢĊŤĸŤĬĠŤŢŦĬĸĸĸĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĠĀĊĠŦŶĠŦĠĊŶŦĊĠĀŶĠĠĀĠĊĊĀĠĠĀĠŶŦĊĀĠĊĀĊĊŶŶĠĀĊŶĊŶĀĠĠĊĊĀĠŶŶĊĠĠĀŶĠĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcccgcargadargrergcagaargagactracagreggergagececregecaaaagreag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccaaacracitericciricaaaagccaecaererere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTAGCTTCCAGGATGGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĊŦŦĀĠĊŦŦĊĊĀĠĠĀŦĠĠĠĠĀŦŦŦĊĊĊŦĀĊĊĀĀĠĀŦŦŦĠĠĠĀĊĀĊĀĠĀĊŦĀŦĀŦĊĊĀĠŦĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ceactraceacaaaacerereaaaarereceaaererecacereceacaereceacaerec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCAGATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGGCCGCTTTACCGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠŦĊĀĠĊĊĊĊŦŦĠĊŦŦĠĊĊŦĊĊĊĀĠĀĠĊĊŦĠŦĊĊĀŦĊĠĠĊĀĀĊĊĀĠĠŦĀĠĠĠŦĊĊĊĊĀĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         réceaercia da decea de crista de conservado de la recea de la conservada de la recentra del recentra del recentra de la recentra del recentra del recentra de la recentra del recentra del recentra de la recentra del recentra del recentra de la recentra de la recentra de la recentra del recentra de la recentra de la recen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTT 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGCCGCCACACATCTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĠĊĊŦĠĠŔĀĠŦŔĊĀŦĠĠĀĠĠĀĠĠĀĠĀŦĊĊŶŦĠĠŦŦŦĊĠĠĠŔĀĠŦĊĠĠŦĊŦĠŦĠĀĊĀĠĊĊŦŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTGGAAGTACATGGAGGAGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGĊŦĠĠŦĠĊŦĠŦĠĊŤŔŦŤĊĠŔŤĊĠŦĠĠŔĠŔŔŦŔĊĊŤĠĊŔŢĠĸŤĸŔĊĊĊĊĊĸĊĸĸĠĊĊĸĸĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a a creceráció de de la comencia del la comencia de  la comencia de  la comencia de la comencia del la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atccadeagctcattcatcadccaagaaantagatgaaatgaatgaattatatatgatgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĠŦĠŦĊŦĊĀĠĊŦĠĊĀĠĀĊĀĠĀĊŦĊĀĠĀĠĊĊĊĀĀĠŦŦŦĊĀĊŦĊŦĠĀĀŦĊŦĊŦĀŦĊŦŦĊŦĀĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACAGGAAGAGGAAGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĊŦŦŦŦĠĊŦĊĊĊĠĠĠŦĀĊĠĀĠĀĠŦĀĠĀĠŦĊŦĀĊŦĊĊŤĀŤĠĀŦĀĀŦĠĠāĠāĀĊ
                                                                             1876
                                                                                                                                                      1860
                                                                                                                                                                                                                                       1816
                                                                                                                                                                                                                                                                                                                                                                                                  1756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 796
                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
ABT14679
ID ABT14679
ID ABT1
AX ABT1
XX ABT1
XX ABT1
XX ABT1
XX Huma
XX Huma
XX Huma
XX Homo

                                                                                                                                         망
                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Sim
Matches 1886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention comprises the amino acid and coding sequences of human cancer-testis (CT) antigens that bind an HLA molecule. The CT antigens the invention are useful for diagnosing, monitoring or treating cancer (e.g. breast cancer, colon cancer, cervical cancer or gastric cancer). The present DNA sequence encodes a human cancer-testis (CT) antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1886 BP; 440 A; 565 C; 481 G; 400 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New cancer-testis (CT) antigens, nucleic acids and encoded polypeptides, useful for diagnosing, monitoring or treating disorder or condition associated with the expression of human CT antigens, e.g. breast cancer or cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-075624/07.
P-PSDB; AAO16118.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-APR-2001; 2001US-0285343P.
14-FEB-2002; 2002US-0356937P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-APR-2002; 2002WO-US012497.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200286071-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; gene; ds; gene therapy; va
CT antigen; breast cancer; colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cancer-testis antigen coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABT14679
                                                       241
                                                                                                                            181
                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GTTAGAGGCGGCTTGTGTGCCACGGGACGCGGGCGGATCTTCTCCGGCCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCCACGGCTTA
                                                                                                                                CGCTTCTTCGCACTCCTGACTCCAACCTGGAAGGCAGAGACTACCTGCGGTCTCCGTGCA
                                                                                                                                                                                                                                                                                           GCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                   ĠĊĊĠĀĠĠĀŦŶĠĠĀĊŦĊĀĠĠĊĊĊĊĀĊŦĊĊĀĠĠĊĀĠĊĊĊŤĊŤĊŤĊŤĊĊŤĀĊĊĠĀĀŦĀĊĠĀĀ
                                                                                                                                                                                                                                                                                                                                                                                              ĠŦŦĀĠĀĠĠĊĠĠĊŦŦĠŦĠŦĊĊĀĊĠĠĠĀĊĠĊĠĠĠŢĊŦŤĊŦĊĊĠġĊĊĀŦĠĀĠĠĀĀĠĊĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LUDWIG INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 151-154; 165pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; DNA; 1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ono
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.5%; Sc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CANCER RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1886;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vaccine; cancer-testis antigen;
on cancer; cervical cancer; gast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Length 1886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gastric cancer.
                                                                                                                                                                                                                                       180
```

8 8 망 Ś 밁 Ś В Ś 뭥 ş 밁 Ś 문 Ś 밁 Ś 밁 Ś 밁 Ś 뭐 S 밁 S 밁 S В S 밁 Ś 밁 Ś 밁 S 뫄

1697

1637 1621 1577

1517

1457 1441 1397 1381 1337 1321 1277 1261 1217 1201

1097

961 917 901 857 841

797

1817

240 240

120 120 60

0

ę,

g 8 뫄 5

유 성

Ş

```
1081
                                                                                                           1081
                                                                                                                       1021
                                                                                                                                   1021
                                                                                                                                                961
                                                                                                                                                             961
                                                                                                                                                                          901
                                                                                                                                                                                                  841
                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                     901
                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                   GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                            GGGCGGCGACACATGTCTACCTGTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                             GCTGGAAGTACATGGAGAAGAAGTACCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                    GCCTGGAAGTACATGGAGGAGGAGGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                      TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                               CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                           GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                     TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                               TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                            GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                  CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                  ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                        1260
                                                                                 1200
                                                                                                          1140
                                                                                                                                   1080
        1380
                                            1260
                                                                    1200
                                                                                              1140
                                                                                                                       1080
                                                                                                                                                1020
                                                                                                                                                            1020
                                                                                                                                                                                      960
                                                                                                                                                                                                              900
                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                          960
                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                          뮹
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
```

중 음 중

유 В ð B

WO9857976-A1

밁

ち 음 성

유성

음 성

닭 S Ş 멍

ઇ g δ 뫄 8 유

멍

```
В
                                                         misc_feature
                                                                                              mat_peptide
                                                                                                                                       sig_peptide
                                                                                                                                                                                                                               Secreted protein;
                                                                                                                                                                                                                                                    Human adult testis secreted protein ga63_6 cDNA.
                                                                                                                                                                                                                                                                          26-APR-1999
                                                                                                                                                                                                                                                                                                                 AAX06785
                                                                                                                                                                                                                                                                                                                                                                                                        1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1621
                                                                                                                                                                                                                                                                                                                                                                                    1861
                                                                                                                                                                                                                                                                                                                                                                                                                            1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561
                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGGTTGGAGCAACAGTCCCAGAGAGGGGCCACGGTGGGAGCTGCGCCCCTCCTTAAAAGA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAAACTACTGTTCCTTCAAAAGCCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                              TGACTTTACATAAAATGTTGATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                        TTGGGTTGGAGCAACAGTCCCAGAGAGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC 1380
                                                                                                                                                                                                                                                                          (first
                                                        /*tag= c
/note= "this:
24(c)"
224..679
                             /*tag= d
/note= "this 1
24(d)"
                                                                                                          /*tag= b
/product= "putative leader/signal
transmembrane region"
                                                                                                                                       /*teg= a
/note= "this region (minus the stop codon at 1672.
is specifically claimed in Claim 24(b)"
73. .111
                                                                                                                                                                                43. .1674
                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                 human; testis; ga63_6;
                                                                                                                                                                                                                                                                                                                 CDNA;
                                                                                                 .1671
                                      region is
                                                                             region
                                                                                                                                                                                                                                                                                                                                                                  1886
                                                                                                                                                                                                                                                                                                                                                                                     1886
                                                                              18
                                      specifically claimed
                                                                             specifically
                                                                                                                    sequence,
                                                                             claimed
                                       ä
                                                                              Ħ
                                                                                                                     8
                                       Claim
                                                                              Claim
                                                                                                                                                             .1674)
                                                                                                                                                                                                                                                                                                                                                                                                          1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
```

```
This cDNA clone, termed ga63 6, codes for a novel human secreted protein CC (see AAW88403). The full-length clone was isolated from a human adult created proteins, or was identified as encoding a secreted or compared protein. Its sequence for cDNAs encoding transmembrane protein on the basis of computer analysis of the amino acid computer shows at least some computers. The invention provides cDNA uterus, adult trachea and adult neural tissue that encode novel secreted proteins (see AAX06780-89) from human adult testis, foetal brain, adult composed proteins are predicted to have biological activities complymuclectides and proteins are predicted probes (see AAX06790-99). The clones are deposited as ATCC 98468, from composed proteins are predicted to have biological activities composed conditions in humans and animals, although no supporting data is composed protein activities include nutritional, cytokine, cell suppressing, haematopoiesis regulation, timsune stimulating (e.g. as vaccines) or inhibition, chemotactic or chemokinetic, haemastatic, thrombolytic activity, and tumour invasion suppressor, cell be useful for gene therapy, and for recombinant production of the claimed to proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 1879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 24(a); Page 84-85; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polynucleotides encoding secreted human proteins - are derived from human foetal brain, adult testes, adult uterus, adult trachea or adult neural tissue cDNA libraries, used as, e.g. vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 1879; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jacobs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GEMY ) GENETICS INST INC.
                                301
                                                                                                                                                                                  181
                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1999-095321/08
                                GATGGTGCTGTCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTC
                              GATGGTGCTGTCT
                                                                                                       GGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCC
                                                                                                                                                         TTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCAC
                                                                                                                                                                                                                                                        GATTCGACT
                                                                                                                                                                                                                                                               GGCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAG
                                                                                                                                                                                                                                                                                                             ĠĠĊŦŦĊĊŦŤĊĊĊŦĊĂĊŦĊĊŦĠĂĀĠĠŦĠĊŦĠĊŦĊĊŦĠĊĊŦĊŦĠĠĊĀĊĊŦĠĊĊĠĊĀĠĊĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                      ĠĠĊĊĠĊŦŦĠŦĠŦĊĊĂĊĠĠĠĂĊĠĊĠĠĠĊĠĠĂŦĊŦŦĊŦĊĊĠĠĊĊĂŦĠĂĠĠĂĀĠĊĊĂĠĊĊĠĊŦ
                                                                                                                                                                                                                                                                                                                                                                                                            Ĭ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mccoy JM, La
J, Howes SH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 457 A; 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00878715
98US-00098588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US012516.
                                                                                                                                                                                                                                  · chádc crechérechadachade crererer erecracean racanneachadacach re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.0%;
        recrece a de la contra del la contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lavallie ER,
H, Fechtel K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 1856.4; ; Pred. No. 0; 4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; 477 G; 401 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treacy M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Spaulding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
          360
                                            366
                                                                                                                     306
                                                                                                                                                           240
                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                  126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <
                                                                                                                                                                                                                                                                                                                                                                                        60
                                              Ş
                                                                                             밁
                                                                                                                               Ş
                                                                                                                                                                     밁
                                                                                                                                                                                                      S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                  1381
                                                                                           1321
                                                                                                                               1327
                                                                                                                                                                   1261
                                                                                                                                                                                                        1267
                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                    GCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGC 1446
ĠĊĊĀĊĠĀĀĀĠĠĊŦĠŦĠĀĀĠĀŦĠŦĊĊĠĀĠŦĊŦĊŦĠĠĠŦĠĠĊŦĊĊĀĠĀĊŦĠĀĠŦŦĊĊŦŦĀĠĊ
                                                                                           CGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTT 1386
                                                                                                                                             CCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGC
                                                                                                                                                                                                                        rcadageccaecciedadecedecaacaareccaecaecaecaecaecaecireccirriereaec
                                                                                                                                                                                                                                              TCAGAGGCCAGCCTGCAGCGGCAACAATGCGACCACCTCCCCACAAGACTCCCCTTTGTCAGC 1266
                                                                                                                                                                                                                                                                                                   CGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCAC
                                                                                                                                                                                                                                                                                                                         CGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCAC 1206
                                                                                                                                                                                                                                                                                                                                                                            AAGTĀCĀTĠĠĀĠĠĀĠĀĠĀTĊĊŢŦĠĠŢŦŢĊĠĠĠĀĀĠŦĊĠĠŢĊŢĠŦĠĀĊĀĠĊĊŢŦĠĠĠĊĠĠ
                                                                                                                                                                                                                                                                                                                                                                                                    AAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCCGGTCTGTGACAGCCTTGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠŦĠĊŦĠŦĠĊŦĂŦŦĊĠĀŦĊĠŦĠĠĀĠĀĀŦĀĊĊŦĠĊĀŦĊĀŦĀĀĊĊĊĊĠĀČĀĠĊĊĀĀĠĠĊĊŦĠĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCAACAGCCAAGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACTGGĂGĂĂĂČĊĂĂĂĂČĊŤĠĠĊĂĠĊĊŤĊĊŤĠĊĀĠĊŤĠĊĊĊĊĊĊĊĊĠĊĀĊĀĠĠĠĠĊŤŤĠĊŤĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ĠĀĠĊŦĊĀŦŤĊĠĀŤĊĀĠĊĊĊĀĠĠĀĀĀŦĀĠĀŤĠĀĀĀŤĠĀĀŦĠĀĀŤĀŤĀŤĠĀŤĠĀĠĀĀĊŤĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTGGAGAAACCCAGAGCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGGCCTTGCTG 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTTTTĠCTCCCCGGGTĀCGĀGĀĀGTĀGĀGTCTĀCTCCTĀTGĀTĀĀTGGĀGĀĀĀĀCĀTCCĀG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      caderiscasacadaericasasececaasiriricaererisaarererarerizateerree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTTCTATCTTTCTAACCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAĀĠĀĠĠĀĠĠĀĀĀĠĊĀĠĠĀĀĠĀĀĠĠĀĊĀĠĠĠĠĀĊŦĀĀĠĠĀĠĠĠĀĊĠĠĠĀĠĠĊŤĠŦĠŦĊŤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGAGGAGGAAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGACACAAGAACACAAGCAGGAAGAGGGGCAGAAACAGGAAGAGCGAAGAGAGAGAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cécrégecrigadadecreadecaacaacergaadadecrecracaarecrecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCTGGCCTGAGAGGGCTCAGCAACACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   accaccarcarcicciccarcicacciccacricacacacidacacacacacacaciccacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCTCTATTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCCTGAAGGTCTCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acticactaccerrecticaaccacercractareccaaeaaeaeccaeccaecca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCCCAGCCA
                                                                                                                                               1320
                                                                                                                                                                                                                        1260
                                                                                                                                                                                                                                                                                                                                                                            1140
                                                                                                                                                                                                                                                                                                                                                                                                              1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
```

밁 S В S 맑 Ś 뭐 Ş 밁

Ś

```
RESULT 5
AAZ24890
ID AAZ2
XX AAZ2
XX AAZ2
XX O2-I
DT O2-I
DE Hum
XX Hum
XX Hum
XX Inn
XX Inn
XX OS
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                   19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
01-APR-1998;
01-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; ds; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; continue of the continu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9947540-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; secreted protein; fusion protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ24890 standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       secreted protein gene 80 clone HLWAY54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTACATAAAATGTTGATCTTCAAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGAGCAACAGTCCCAGAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGATGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTCTATTCTGCCCACACCCCAGCCCAACCTGCCACGTTCTCTATTGTTTTGAGACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGC-TTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTTGGCAAAAGTGAGGACGTT 1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAAC 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGATGACT 1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTAMTCACATTTCCTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SGTTTATTTTGCCCACACCCCAGCCCAACCTGCCCASGTTCTCTATTGTTTTTGAGACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGCTTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAG-CCTGGCAAAAGTGAGGACGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                   98US-0078563P.
98US-0078566P.
98US-0078573P.
98US-0078574P.
98US-0078576P.
98US-0078578P.
98US-0078578P.
98US-0078578P.
98US-0078573P.
98US-0078573P.
98US-0078573P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US005804
                                                                                                                                             S-0078573P.
S-0078574P.
S-0078576P.
S-0078577P.
S-0078577P.
S-0078579P.
S-0078581P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1560
```

```
(HUMA-) HUMAN GENOME SCI INC
```

Wei Y, Shi Y, SM, Ni J, Ro PA; Rosen CA, , Duan RD, Yu G, Young PE, Fo , Kyaw H, Ebner R, Feng P, Soppet R, Lafleur DW, DR; Olsen HS;

WPI; 1999-562050/47 P-PSDB;

New isolated human genes, useful for die cancers, neurological disorders, immune disorders. diagnosis and une diseases, and treatment of es, inflammation of or e .g. blood

Claim 1; Page 346; 484pp; English.

CC This sequence represents a nucleic acid molecule which encodes a secreted cc human protein. The gene number, and the clone it is derived from, are cdetailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene can be used to generate fusion cc (e.g. AAZ24802) for increasing the stability of the fused protein as compared to the human protein only. The invention relates to 95 novel compared to the human protein only. The invention relates to 95 novel compared to the ragments (nucleic acid sequences: AAZ24811-224907; amino cc acid sequences AAX41308-Y41404) which are useful for preventing, treating cor ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the cnew polypucleotides in a sample or by determining the presence of mutations cu polypucleotides, based on which tissues they are most highly expressed cc in the new polypucleotides, based on which tissues they are most highly expressed in (see AAZ24811 for described uses)

Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 ď, 0 Other;

S 밁 Ś 밁 밁 δ 뮹 S 망 S 5 밁 δ 밁 S 밁 밁 Ś Query Match Best Local Similarity Matches 1860; 493 433 444 373 384 313 324 253 264 193 204 73 84 ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTTGCTC ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTC AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGGCTGCCGGAATCCCAC CATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCCT CACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC CACTCCAGGCAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC 203 CCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTC CCTGAAGGTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCC 143 Conservative 95.6%; 0; Pred. Score 1811.2; Mismatches No. 0; ВB 8 2; Indels Length 1892; 4. Gaps 492 432 443 372 323 503 312 252 192 72

Ś

CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGC

```
1524
                                                                                                                                                                    1450
                                                                                                                                                                                                                        1391
                                                                                                                                                                                                                                                                                                        1344
                                                                                                                                                                                                                                                                                                                                  1271
                                                                                                                                                                                                                                                                                                                                                            1284
                                                                                                                                                                                                                                                                                                                                                                                        1212
                                                                                                                                                                                                                                                                                                                                                                                                                   1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1164
                                                                                                                                                                                                                                                                                                                                                                                                                                             1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          744
GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                          TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                   CCAGCAGTGTCTGATGAGAAACCGGAATCGGAAGGTGTCCCGGCATGAGATGTCTGCAGAA
                                                                                                                                                                       CCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAG
                                                                                                CCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAA
                                                                                                                                                    AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTT
                                                                                                                                                                                                                                                                                                                                      GAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA
                                                                                                                                                                                                                                                               TTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA
                                                                                                                                                                                                                                                                                                                   GAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                          eceecaácaáreceácacacciccácaaagacrecerrie-caecerrecerrecea
                                                                                                                                                                                                                                                                                                                                                                                           GCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTTGCTTAGCTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGGCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGGĀGĀĀTĀCCTGCĀTCĀTĀĀCCCCCĀCĀGCCĀĀGGCCTGGĀĀGTĀCĀTGGĀGGĀGGĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGGTGCTATTCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGGAAATAGATGAATGAATGAATATATGATGAGAAACTCCTACTGGAGAAACCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGGAAATAGATGAAATGAAATATATATGATGAGAACTCCTACTGGAGAAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAGAAGTAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAĞCCCAAGTTTCACTCTGAATCTCTATCTTAACCCTTCCTCTTTTGCTCCCCCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAĀGĀĀĠGĀCĀĠĠĠĀĊŤĀĀĠĠĀĠĠĀĊĠĠGĀĠĠĊŤĠŤĠŤĊŤĊĀĠĊŤĠĆĀĠĀĊĀĠĀĊŤĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠĊŔĠĠŔŔĠŔĠĠĠĊŔĠŔĬĸĬĸĊŔĠŔŔĠŔĠĊŔŔĠŔĠĠŔĠĠŔĸĊŔĠĠŔŔĠŔĠĠŔĠĠĸĸĸĠĊŔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĠĊĊĀĠĀĠĊĀĊĀĀĠĊĀĠĠĀĠĊĀĀĠĠĀĠŦĠĠĀĠĊĀĊĀĠĠČĀĠĠĀĠĊĊĠĀĊĀĊĀŖĀŖĀĊŖĊĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         retaetetárgataatggagaacatecaggageteatregateage
                                                                                                1569
                                                                                                                                                                                 1523
                                                                                                                                                     1509
                                                                                                                                                                                                           1449
                                                                                                                                                                                                                                    1463
                                                                                                                                                                                                                                                                1390
                                                                                                                                                                                                                                                                                         1403
                                                                                                                                                                                                                                                                                                                   1330
                                                                                                                                                                                                                                                                                                                                                                                                     1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1163
                                                                                                                                                                                                                                                                                                                                                                                                                                 1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  612
```

```
RESULT 6
ADA39940
ADA39940
ADA393X
AX ADA3
AX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; secreted protein; cancer; hyperproliferative disorder; rheumatoid arthritis; autoimmune disorder; haematopoietic disorder; anaemia; allergic reaction; asthma; cardiovascular disorder; wound healing; cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W02002102993-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADA39940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADA39940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCAAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccagcccaaccrgcccacgrrercrafretriragacacccarrecrrreaggcrgccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĊŦŦĊŦĠĠĠŦĊŦĠŦŦĂĊŦĊĠĠĊĊĊĊŦĂĊŦĊĂĊĂŦŤŦĊĊŦŦĠĠĠŦŦĠĠÁĠĊÁĂĊĂĠŦĊĊĊĂĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1689
```

WPI; 2003-175238/17. 21-MAR-2001; 2001US-0277340P. 19-JUL-2001; 2001US-0306171P. 13-NOV-2001; 2001US-0331287P. 19-MAR-2002; 2002WO-US008123 (HUMA-) HUMAN Ş Ruben SM; GENOME

New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing, preventing or treating cancer or other hyperproliferative disorder, asthma, allergies or AIDS.

Claim 9; SEQ ID NO 322; 3205pp; English.

The invention relates to novel genes ADA39629-ADA40565 and proteins ADA40566-ADA41501 for human secreted proteins, useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene fragments, and agonists nucleic acid molecules, antibodies or their useful for preparing a diagnostic or pharmaceutical composition for polypeptides are diagnosing or treating cancer or other hyperproliferative disorder. The polypeptides and nucleic acid molecules are also useful for detecting, prognosticating, treating cancer or other hyperproliferative disorders including neoplasms, autoimmune alsorders (e.g. diabetes, rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis, autoimmune thyroiditis or haemolytic

밁 8 용 **중** 2 중

Дb Ś 뭐 8 B Ś 밁 Ś 문 S 밁 á 밁 Ś 밁 ঠ B Ś 밁 S 밁 S 밁 Ś 문 δ 밁 δ 밁

		684 GCAGGAAGAGGGGCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGGAGGGAAGAGCA 743		Qy       564 CAGCAACAACGTGGAAGACTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGC 623       QY       164 CAGCAACAACGTGGAAGACTCCTACAATCCTCCTTGTCCCTGGGAAGCCAAGGAAGC 623       Db       1630 CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAAGG 612       Db       1630 CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAAGG 612       CO       1704 CAGCAACAACGTGGAAGCTCCTACAATCCTCCTTGTCCCTTGGGAAGCCAAGGAGCAAGC 612       CO       1704 CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTTGGGAAGCCAAGGAGCAAGC 612       CO       1704 CAGCAACAACGTGCTACAATCCTCCTTGTCCCTTGGGAAGCCAAGGAAGCCAAGCAAG					QY 264 ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTC 323						ftp.wipo.int/published_pct_sequences.  Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;	s and antibodies are Qy serial identification Db sequence data for ication, but was	fungal or viral infections including HIV/AIDS), or wound healing and disorders of epithelial cell proliferation. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as	Cowet greate or cronn a greate), neurodegenerative greaters (e.g. 2 Alzheimer's disease or Parkinson's disease), cardiovascular disorders Db 793 (e.g. atherosclerosis, myocarditis), infectious diseases (bacterial,
--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	---	--	---

```
The invention relates to a novel human secreted polypeptide comprising a defined sequence given in the specification. The polypeptide, nucleic cacid molecule, antibody, agonist or antagonist of the invention may be invention for preparing a composition for diagnosing or treating a composition of the invention diagnosing or treating a composition of the polypeptide at the title, inflammation, Grave's disease, counds and stream of the polypeptide may also be used during gene compositions. The polypeptide may also be used during gene compositions of the polypeptide with a binding partner and determining whether the composition of the polypeptide with a binding partner and determining whether the composition of the polypeptide with a binding partner and determining whether the composition of the invention of the human secreted protein-related DNA of the invention.
                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                            New human secreted polypeptide for diagnosing, preventing or treating hematopoletic or hematologic disorders (e.g. anemia), autoimmune disorders (e.g. diabetes) or hyperproliferative disorders (e.g. cance)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antianaemic; antirheumatic; antiarthritic; antiinflammatory; antithyroid; antiinfaminosuppressive; dermatological; nephrotropic; antiparkinsonian; neuroprotective; nootropic; antibacterial; virucide; fungicide; antiparasitic; antiarteriosolerotic; vulnerary; cytostatic; haemopoletic; haematologic; anaemia; autoimmune disorder; rheumatorid arthritis; inflammation; Grave's disease; diabetes; systemic lupus erythematosus; glomerulonephritis; neurodegenerative; parkinson's; Alzheimer's; wound; hyperproliferative; atherosolerosis; cancer; bacterial; viral; fungal; parasitic infection; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-MAR-2002; 2002WO-US008277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003038063-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADC73578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ÇĄ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 211; 2272pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAAAAAAAA 1895
|||||||||||
|TTCAAAAAAAA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; DNA; 1892
                                                                           B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein-related DNA -
                                                                     461 A; 565 C; 472
                                        95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                Score 1811.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽P
                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                   G;
                                                                   394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OES
                                                                   H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ä
                                DB
                                                                   0
                               10;
                                                                 Ģ
                                                                 0 Other;
                           Length 1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç
                                                                         밁
                                                                                                          δ
                                                                                                                                               밁
                                                                                                                                                                          5
                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 1860; Conserv
                                    1044
                                                                       973
                                                                                                          984
                                                                                                                                               913
                                                                                                                                                                                924
                                                                                                                                                                                                                     853
                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                             793
                                                                                                                                                                                                                                                                                                                                804
                                                                                                                                                                                                                                                                                                                                                                  733
                                                                                                                                                                                                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
CGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 GGACGCGGGCGATCTTCTCCGGCCATGAGGAAGCCAGCCGCTTGGCTTCCCTTCACT
                                                        cecredex de creciente de conserva de conse
                                                                                                                                                       CCAGGAAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                 CCCTGGCAGCTTCCTGCAGCTGCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGAT
                                                                                                                                CCAGGAAATAGATGAAATGAAATATATGATGAGGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                               ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                     ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                                                                                                                    AGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGT
                                                                                                                                                                                                                                                                                                                                                                              ĠĠŖĀĠŖĀĠĠĀĊŔĠĠĠĠĀĊŦŖĀĠĠŖĠĠĠĠĠĠĠĠĠĠĠĠĊŦĠŦĠŦĊŦĊŔĠĊŤĠĊŔĠŖĊŔĠŖĊŦĊ
                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGAÁGÁGGGGCÁGAAACAGGAAGÁGCAAGAAGAGGAACAGGAÁGAGGGGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠĊĊĀĠĀĠĊĀĊĀĀĠĊĀĠĠĀĠĊĀĀĠĠĀĠŤĠĠĀĠĊĀĊĀĠĠĊĀĠĢĀĠĊĊĠĀĊĀĊĀĀĠĀĀĊĀĊĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCGATCGCTCCCTTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCGATGGTGCTGTCTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACTCCAGGCAGCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTGGAAGGCAGAGACTACCTGCGTCTCCGTGCAACCCACGGCTGCCGGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cácrecadedeadecererereracedaaracedaacecrrerregeaerecede
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGAAGGTGCTGCTCTGCCTCTGGCACCTGCCGCAGGCCCAGGATTCGACTCAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGGACCCAGGATTCGACTCAGGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠĠĠĸĊĊĠĠĸĊĠĠĸŤĊŦŤĊŤĊĊĠĠĊĊŔŦĠĸĠĠĸĸĠĊĊĸĠĊĊĠĊŢĠĠĊŢŤĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                972
                                                                                                                                                                  983
                                                                                                                                                                                                     912
                                                                                                                                                                                                                                        923
                                                                                                                                                                                                                                                                             852
                                                                                                                                                                                                                                                                                                                863
                                                                                                                                                                                                                                                                                                                                                   792
                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                         732
                                                                                                                                                                                                                                                                                                                                                                                                                                                            743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
```

```
RESULT 8
ADD37623
ID ADD3
XX
AC ADD3
XX
DT 15-J
XX
DE Huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                     ADD37623 standard; cDNA; 1892 BP
                                human secreted protein; Antiallergic; Antiinflammatory; Antibacterial; Anti-HIV; Cytostatic; Immunosuppressive; Hemostatic; ss.
                                                                                                                     15-JAN-2004
                                                                                                                                                        ADD37623
                                                                                                                                                                                                                                                                                                              1884
                                                                                                                                                                                                                                                                                                                                                                                                                      1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1764
                                                                                                                                                                                                                                                                                                                                                 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1092
                                                                                                                                                                                                                                                                              1869
                                                                                                                                                                                                                                                                                                                                                                                  1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1224
                                                                                   secreted
                                                                                                                                                                                                                                                                       TTCAAAAAAAA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                               GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                         TTCAAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTTGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGA-TT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTG-CAGCCCCTTGCTTGCCTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA 1091
                                                                                                                    (first entry)
                                                                                 protein encoding sequence #105
                                                                                                                                                                                                                                                                                                                                                 1868
                                                                                                                                                                                                                                                                                                                                                                                  1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1223
                                                                                                                                                                                                                                                                                                                                                                                                                      1809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1151
```

```
The present invention relates to an isolated polypeptide or human CC secreted protein. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind are useful for CC preparing a diagnostic or pharmaceutical composition for diagnosing or CC preparing a llergic or asthmatic disorders. The polypeptide is also useful CC for identifying a binding partner by contacting the polypeptide with a CC binding partner, and determining whether the binding partner increases or CC decreases the activity of the polypeptide. The polypeptides and nucleic acid molecules are also useful for detecting, preventing, diagnosing, CC prognosticating, treating or ameliorating inflammatory disorders or epithelial cell collection, immune diseases, cardiovascular disorders, blood-related disorders. Infectious diseases, endocrine disorders, or gastrointestinal CC disorders. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or long-range restriction compaping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunohistochemistry assays. The present sequence represents a human constitution are also account of the tissues immunohistochemistry assays. The present sequence represents a human constitution are also account of the tissues immunohistochemistry assays. The present sequence represents a human constitution and account of the tissues immunohistochemistry assays. The present sequence represents a human constitution are also account of the tissues in the polypeptides are useful for providing and human constitution are accounted accounted to the constitution of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing treating allergic or asthmatic disorders, or related immediate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAR-2001; 2001US-0277340P
19-JUL-2001; 2001US-0306171P
13-NOV-2001; 2001US-0331287P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 7; SEQ ID NO 105; 1323pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypersensitivity disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-140218/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200290526-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-MAR-2002; 2002WO-US008279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ruben SM
```

õ

Ś

5

S

S

S

δ

Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;

secreted

protein

encoding

sequence.

문 S 망 á 밁 δ 밁 5 밁 Ş Query Match Best Local S Matches 1860 1860; 253 193 324 264 204 133 144 73 84 13 24 Similarity ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTC AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC CACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC CACTCCAGGCAGCCCTCTCTCCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC CCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTC ccrgaagergcrecreccreccrecaccreccecaecccaegarregacreaegeccc ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTC AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC Conservative 95.6%; Score 1811.2; Pred. No. 0; 0; Mismatches 0; DB 10; Length 1892; B ,, Indels 4. Gaps 323 383 312 252 263 192 203 132 143 72 83

ঠ В Ş В 5 В á 밁 5 밁 Ş В Ś Б S

```
AGATGTCCGAGTCTCCGGGTCGCCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGA-TT 1449
                       AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTT 1463
                                                                  TTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA 1403
                                                                 rrreraceereecreer
                                                                                               ĠĀĠĊĊĦĠŦĊĊĀŦĊĠĠĊĀĀĊĆĀĠĠŦĀĠĠĠŦĊĊĊĊĀĠĀĀŦĊĀĠĠĊĊĠĊŦŦŦŦĀĊĠĠĠĊĦġĠĀ
                                                                                                              GAGCCTGTCCATCCGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA 1343
                                                                                                                                                ĠĊĠĠĊŔĀĊŔŔŦĠĊĠŔĊŔĊĊŤĊĊĊŔĊŔĀĠŔĊŤĊĊĊŤŤŤĠ
                                                                                                                                                     TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGGAGTGCCACTCAGAGGCCAGCCTGCA 1223
                                                                                                                                                                                     rédedrérigrakérrérigéredrirókkágérigákágókágrádókágrádkágdókágcórigók
                                                                                                                                                                                                                                GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGGCGACACACATGTCTACCTG
                                                                                                                                                                                                                                            GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTG 1163
                                                                                                                                                                                                                                                                                                                                  ĊĠŦĠĠĀĠĀſŦĀĊĊŦĠĊĀŦĊĀŦĀĀĊĊĊĊĠĀĊĀĠĊĊĀĀĠĠĊĊŦĠĠĀĀĠŦĀĊĀŦĠĠĀĠĠĀĠĠĀ
                                                                                                                                                                                                                                                                                         CGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA 1103
                                                                                                                                                                                                                                                                                                                                                                 CCAGGAAATAGATGAAATGAATATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                CCAGGAAATAGATGAAATGAAATGAATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                     cccnddcadccrccrdcadcrdccccacacada-dccrrdcrddrdcrdrdrdcrarrcdar
                                                                                                                                                                                                                                                                                                                                                                                                            ACGAGAAGTÁGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                          ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĠĊŔĠĠŔŔĠŔĠĠĠĠĊŔĠŔĸŔĊŔĠĠŔŔĠŔĠĊĸŔĠŔŔĠŔĠĠŔĸĊŔĠĠĸŔĠĸĠĠĸĠĠĸĸĸĠĸĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGGAAGAGGGGCAGAAACAGGAAGAGGCAAGAAGAGGAACAGGAAGAGGAAGGGAAGGAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cháchácháchtágadáchter a cháchá rectrectificat certada a actada a cháchách
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ċĀTĊŦĊĀĊĊĊĠĀĊŦŦĊĀĊĀĠŦĠĀĆĀĠĀĀĆĠĊĊĀĠĀĊĆŦŤĊĊĀĠĊĊĊŦĠĠĊĊŦĠĀĠĀĠĠĊŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         scárddacrircidordrigidecedactridecaactaaaddecidiga 1390
                                                                                                                                        -CAGCCCCTTGCTTGCCTCCCA 1270
                                                                                               1330
                                                                                                                                                                                    1211
                                                                                                                                                                                                                                 1151
                                                                                                                                                                                                                                                                             1091
                                                                                                                                                                                                                                                                                                                     1031
                                                                                                                                                                                                                                                                                                                                                                 972
                                                                                                                                                                                                                                                                                                                                                                                      983
                                                                                                                                                                                                                                                                                                                                                                                                             912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       803
                                                                                                                                                                                                                                                                                                                                                                                                                                                      852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             372
  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
WPI; 2003-167512/16.
P-PSDB; ADA57026.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                      21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                 19-MAR-2002; 2002WO-US008278
                                                                                                                                                                                                   immunosuppressive; antiinflammatory; antiasthmatic; antiallergic; cytostatic; cerebroprotective; neuroprotective; notropic; cardiovascular; antiarteriosclerotic; gene therapy; human secreted protein; immune disorder; inflammation; respiratory disorder; cancer; CNS disorder; neurodegenerative disorders; inflammatory bowel disease; nephritis; Crohn's disease; asthma; allergy; intiple sclerosis; ischaemic brain injury; Parkinson's disease; altergy; Alzheimer's disease; atherosclerosis; myocardicis; chromosome mapping; triple helix formation; antisense gene therapy; forensic biology; ds;
                                                        (HUMA-)
                                                                                                                                           27-DEC-2002.
                                                                                                                                                                 WO2002102994-A2
                                                                                                                                                                                                                                                                                                                         Gene encoding human secreted protein #309.
                                                                                                                                                                                                                                                                                                                                                        20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                   ADA56130
                                Ğ
                                                                                                                                                                                       sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1750
                                                    HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1510
                               Ruben SM
                                                                                                                                                                                                                                                                                                                                                                                                 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAAAAAAAAA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGGGCCACGGTGGGAGCTGCGCCCCCCTTAAAAGATGACTTTACATAAAATGTTGATC 1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AĠĀĠĠĠĊĊĀŦĠĠŤĠĠĠĀĠ-ŤĠĊĠĊĊĊŤĊĊŤŤĀĀĀĀĠĀŤĠĀĊŤŤŤĀĊĀŤĀĀĀĀŤĠŤŤĠĀŤĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ¢ĊĊĀĠċĊċĀĀĠĊŕĠċĊċĀĊĠŦŦĊŤĊŦĀŦŦĠŦŦŦŦĠĀĠĀĊĊĊĀŦŦĠĠŦŦŦĊĀĠĠĊŦĠĊĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠĠĀĠŦŦĊĀĠĊĀĊĊŦŦĠĀĊŦĊŦĀĠĠĊĊĀĠŦŦĊĠĠĀŦĠĀĠĊŤĠĠĊĠŦĊŦĀŦŦĊŦĠĊĊĊĀĊĀĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TĠĀĠĀĊŦŤĀĊĀĠŦĠĊĠĊŦĠĀĠĊĊĆŦĠĠĊĀĀĀĀĠŦĠĀĠĠĀĊĠŦŦĠŦĠĊŦŤĊĠĀŦĠĠĀĠĊĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccacadrarcigardadaaaccccaarccgaaaggreercccccaargadargretgaaa
                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                DNA:
                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                1892
                                                                                                                                                                                                                                                                                                                                                                                               ВP
```

1868

1749

1689 1703 1629 1643 1569

1809 1823

804

684 613 624 553 564 493 504 433

444

373

384 313

Ś 문 Ś 뮍 \$ В Ş 밁 Ś 밁 Ş B Ś 밁 Ś 밁 Ś 밁 Ś В Ś 뭐 Ş 밁 Ś 뭐 S 당 5 멍 S 망 Ş 뭐 S

1331 1344 1271

```
CC neurodegenerative disorders, or polypeptides comprising an amino acid contribodies or antibody fragments that bind to the polypeptides, nucleic carids encoding the polypeptides, agonists or antagonists that binds to the polypeptides, nucleic carids encoding the polypeptides, agonists or antagonists that binds to the polypeptide, are useful in preparing diagnostic or pharmaceutical compositions for diagnosing, treating or preventing an e.g. immune cities of compositions for diagnosing, treating or preventing an e.g. immune cities or crohn's disease', respiratory disorders (e.g. asthma and cities or ischaemic brain injury), neurodegenerative (e.g. multiple sclerosis or ischaemic brain injury), neurodegenerative cities are useful for chromosome identification, chromosome companing, for controlling gene expression through triple helix formation or antisense DNA or RNA, in gene therapy, for identifying individuals from minute biological samples, in forensic biology, and as hybridization or sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) creating or preventing neural disorders, immune system disorders on sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) creating or preventing neural disorders, immune system disorders, and for treating or preventing neural disorders, to the invention. Note: The sequence data for this patent did form part of the printed specification, this patent did form part of the printed specification, the both published pot sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 1860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1892 BP; 461 A; 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to 592 new human secreted polypeptides useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New human secreted polypeptides and polynucleotides, useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurodegenerative disorders.
                                           373
                                                                                384
                                                                                                                       313
                                                                                                                                                           324
                                                                                                                                                                                                                                     264
                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                 144
      444
                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21; SEQ ID NO 319; 1754pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                               CACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGAAGGTGCTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCC
                                                                                                                                                                                                                       ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGCTC
                                                                                                                                                                                                                                                                                                                                                        CACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTC
    CAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCCAGTCTCTATTCTCTCACC
                                                                                                                                                         ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTCTGCTC
                                                                                                                                                                                                                                                                            AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1811.2;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; 472 G; 394 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10; Length 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                          252
    503
                                                                                443
                                                                                                                                                         383
                                                                                                                                                                                              312
                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                                                             203
                                                                                                                                                                                                                                                                                                                                                                                                                                    132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72
                                           432
                                                                                                                    372
                                                             밁
                                                                                            δ
                                                                                                                                     밁
                                                                                                                                                                      δ
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                     1391
                                                                                              1464
                                                                                                                                                                                                                                                                                               1271
                                                                                                                                                                                                                                                                                                                                  1284
                                                                                                                                                                                                                                                                                                                                                                           1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  433
                    CCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGAATGTCTGCAGAA
                                                                                    CCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCCGGCGACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGAT 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGGAAATAGATGAATGAATGAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTT
                                                                                                                                                                                                               TITGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA 1403
                                                                                                                                                                                                                                                                                             GAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA
                                                                                                                                                                                                                                                                                                                                    GAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGA 1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCTTTTTGCTCCCCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCT 563
                                                         CCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAG
                                                                                                                                     AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGA-TT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTGGCAGCCTCCTGCAGCTGCCCACACAGA-GCCTTGCTGCTGTGCTATTCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGGAAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCCT
1449
                                                                                                                                                                                                                                                                                                                                                                                                                1283
                                                           1509
                                                                                                1523
                                                                                                                                                                          1463
                                                                                                                                                                                                                                                                                                                                                                           1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             972
                      1583
                                                                                                                                                                                                                                                                                               1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           612
```

5 뭐 Ś Ъ ঠ 맑 Ś 밁 Ś 뭐 S 뫄

```
RESULT 10
ADA450
ADA450
AC ADA451
AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                               11-JUN-1997
12-JUN-1997
08-JUL-1997
08-SEP-1997
02-OCT-1997
27-OCT-1997
07-NOV-1997
07-NOV-1997
05-JUN-1998
11-JUN-1998
11-JUN-1998
04-AUG-1998
04-SEP-1998
08-SEP-1998
         (JACO/)
(MCCO/)
(LVAL/)
(COLL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; gene; ss; genetic disorder; genetic fingerprinting; autoimmune disorder; multiple sclerosis; systemic lupus erythematosus; insulin dependent diabetes melliture; graft-versus-host disease; anaemia; periodontal disease; bone fracture; cartilage damage; central nervous system disorder; Alzheimer's disease; parkinson's disease; cancer; nutrition; carbon source; nitrogen source; carbohydrate source.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003044935-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA45034 standard; cDNA; 1854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1630
) JACOBS K.
) MCCOY J M.
) LA VALLIE E R.
) COLLINS-RACIE L J
) EVANS C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polynucleotide #29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCAAAAAAAAAA
||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGGGCCACGGTGGGAGCTGCGCCCCTCCTTAAAAATGACTTTACATAAAATGTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAAAAAAAAA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGGCCATGTGGGAG-TGCGCCCTCCTTAAAAGATGACTTTACATAAAATGTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cricidedicidirakorodececciakoroakaniriocinidedirideakakakoakoroceak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG 1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             óccadeccaaccideceaceiricirciatridiriridadaceccatriderricadecidece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGGGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-00746783
                                                                                                                                    97US-0086234P

97US-0092115P

97US-0090100P

97US-0090100P

97US-0090111P

97US-0090111P

98US-00092722

98US-00096588

98US-00130189

98US-00149633

98US-00149633

98US-0018596
                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0086236P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1569
```

```
The invention relates to human polynucleotides and the polypeptides they CC encode. The polynucleotides can be used to express recombinant proteins or analysis, characterisation or therapeutic use, as markers for tissues in which the corresponding protein is expressed, as molecular weight CC chromosomes or to map related gene postitions, to compare with endogenous probes to hybridise and discover novel related DNA sequences, as a source of information to derive PCR primers for genetic fingerprinting, to raise canti-protein antibodies and in gene therapy. The proteins can be used to assays designed to quantitatively determine levels of the protein in CC protein is preferentially expressed and to treat autoimmune disorders (e.g. multiple sclerosis, systemic lupus erythematosus, insulin dependent CC diseases, bone fractures, cartilage damage, central nervous system CC disorders (e.g. Alzheimer's disease), anaemias, periodontal CC disorders (e.g. Alzheimer's disease or Parkinson's disease) and cancers. CC or supplements, e.g. as carbon, nitrogen or carbohydrate sources. This CC sequence represents a human polynucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 99; Page 157-158; 288pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jacobs K,
Merberg D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptides and polynucleotides having biological activities, useful as nutritional sources or supplements, or for treating e.g. autoimmune diseases, cancers, bone fractures or damages, or central nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-521754/49.
P-PSDB; ADA45035.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MERB/)
(TREA/)
(SPAU/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MERBERG D.
TREACY M.
SPAULDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mccoy JM,
Treacy M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ⋖
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     La Vallie ER,
Spaulding V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collins-Racie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ě
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Evans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ç
```

Query Match Best Local Similarity Sequence 1854 BP; 453 A; 546 C; 459 G; 393 T; 0 U; 3 Other;

77.9%; Score 1476.6; 97.1%; Pred. No. 0;

DB

9;

Length 1854;

뫄 Ś 뫄 Ś 문 Ş 밁 S Matches 1834; 356 367 297 307 238 247 179 187 120 127 61 67 7 ACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCA acreactaceártectecaaceacerciactarecaadadactectererecadece-GATGGTGCTGTCTGCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTC dangandendreteriaciócka och eccentaris de contra de cont GGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCC TTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCA-TTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCAC datrodactolagica de la comercia del la comercia de la comercia de la comercia del la comercia de  la comerci GGCTTCCTTCACTCACTGAAGGTGCTGCTGCTGTCTCTGGCACCTGCCGCAGCCCAG Conservative ω • Mismatches 7; Indels 45; 426 355 366 306 296 246 178 237 186 119 126 60

Ş 멂 S 맑 5

```
1294
                                                                                                                                                                                     1327
                                                                                                                                                                                                                  1236
                                                                                                                                                                                                                                                  1267
                                                                                                                                                                                                                                                                                 1178
                                                                                                                                                                                                                                                                                                                1207
                                                                                                                                                                                                                                                                                                                                               1120
                                                                                                                                                                                                                                                                                                                                                                            1147
                                                                                                                                                                                                                                                                                                                                                                                                             1062
                                                                                                                                                                                                                                                                                                                                                                                                                                          1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGG 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCTGTGCTATTCGATCGTGGAGAATACCTGCATAACCCCCACAGGCCA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGAGGAGGAAAGCAAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCT
TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGC
                                                                                                             GCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGC
                                                                                                                                                      CGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGC--
                                                                                                                                                                        CGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTT
                                                                                                                                                                                                                  CCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAG--
                                                                                                                                                                                                                                      CCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGC
                                                                                                                                                                                                                                                                               TCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCA--
                                                                                                                                                                                                                                                                                                         TCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTTGTCAGC
                                                                                                                                                                                                                                                                                                                                           CGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGC--C
                                                                                                                                                                                                                                                                                                                                                                  CGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAGCTGCCCCACACAGAGGCCTTGC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTT-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTTCTATCTTCTAACCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGAGGAGGAAAGCAGGAAAGAAGGACAGGGACTAAGGAGGGACGGGAGGCTGTGTC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAG
 1566
                                                          1506
                                                                                                                                                      1351
                                                                                                                                                                                                                                                  1326
                                                                                                                                                                                                                                                                                                              1266
                                                                                                                                                                                                                                                                                                                                                                           1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1026
                                                                                         1409
                                                                                                                                                                                                                  1293
                                                                                                                                                                                                                                                                                 1235
                                                                                                                                                                                                                                                                                                                                             1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               473
```

```
á
                                                        片
                                                                              5
                                                                                                                   문
                                                                                                                                             Ś
                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                            몽
                                                                                                                                                                                                                                                                                                                          S
   문
                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                          멼
   1816
                                                            1758
                                                                                      1807
                                                                                                                      1700
                                                                                                                                                                                                           1687
                                                                                                                                                                                                                                        1585
                                                                                                                                                                                                                                                                     1627
                                                                                                                                                                                                                                                                                                   1526
                                                                                                                                                                                                                                                                                                                                                             1468
                                                                                                                                                                                                                                                                                                                                1567
                                                                                                                                                                                 1642
TACATAAAATGTTGATCTTCAAAAAAAAA 1895
||||||||||||||||||||||||||
TACATAAAATGTTGATCTTCAAAAAAAAA 1844
                                                                        TGGAGCAACAGTCCCAGAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGATGACTT
                                                                                                                                                                                              GTCTATTCTGCCCACACCCCAGCCCAACCCTGCCCACGTTCTCTATTGTTTTTGAGACCCCCA
                                                                                                                                                                                                                                                         GTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGC 1686
                                                                                                                                                                                                                                                                                                                  ATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTT
                                                                                                                                                                                                                                                                                                                                                            TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCC--C
                                                                                                                                                   TTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGT
                                                                                                                                                                               GTTTATTTTGCCCACACCCCAGCCCAACCTGCCCASGTTCTCTATTGTTTTGAGACCC--
                                                                                                                                                                                                                                        G-CTTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTK--
                                                                                                                                                                                                                                                                                                   ATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAG-CCTGGCAAAAGTGAGGACGTT
                                                                                         1866
                                                                                                                                                                                                                                                                                                   1584
                                                                                                                                                   1806
                                                                                                                                                                               1699
                                                                                                                                                                                                                                        1641
                                                                                                                                                                                                                                                                                                                                                             1525
```

밁 S 밁 δ 밁 S 뭐 S 밁 δ 뭐 Ş В

AAH99858 standard; cDNA; 1671 ВP

16-OCT-2001 (first entry)

Human protein encoding cDNA sequence SEQ ID NO:693.

AAH99858
ID AAH99958
AC AAH99
XX AAH99
XX IG AAH9
XX I anti-HIV; fungicide; antimutagen; cardiovascular; antianaemic; anaemia; antiaggregant; haemostatic; vulnerary; antiulcer; osteopathic; eczema; dermatological; antiallergic; antiatsthmatic; antidabetic; cytostatic; neuroprotective; antidepressant; nootropic; antiparkinsonian; infection; immunostimulant; gene therapy; antisense therapy; vaccine; inflammation; antianaphylactic; rheumatoid arthritis; septic shock; pancreatitis; cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity; genetic disease; haematopoietic disorder; platelet disorder; asthma; thrombocytopaenia; osteoporosis; severe combined immunodeficiency; allergic rhinitis; diabetes; multiple sclerosis; depression; Human; cancer; ulcer; HIV infection; human immunodeficiency virus; antiinflammatory; antirheumatic; antiarthritic; immunosuppressive; antibacterial; endocrine; cardiant; central narvous system; virucide; neurological disorder; ss. Alzheimer's disease; Parkinson's disease; disorder;

WO200153455-A2

26-JUL-2001

22-DEC-2000; 2000WO-US035017

23-DEC-1999; 99US-00471275 21-JAN-2000; 2000US-00488725 25-APR-2000; 2000US-00552317

Ś 8 Ś 밁 S 닭 8 뮍 S 밁 S 밁 ð 밁 Ś 문 S 밁 S

S 밁

HYSEQ INC

Ţ, Liu C, Drmanac R

WPI; 2001-457603/49. P-PSDB; AAM25917.

Query Match Best Local S Matches 1273

1273;

457 151 397 91

```
CC AAM199166 to AAH199904 encode the human proteins given in AAM12525 to CC AAM25963. The proteins can have activities based on the tissues and cells CC they are expressed in, such as: antinflammatory; antirheumatic; criminosuppressive; antibacterial; endocrine; cardiant; CC cardiavascular; antianemic; antiaggregant; haemostatic; vulnerary; CC antiulcer; osteopathic; dermatological; antiallergic; antiasthmatic; CC antidabetic; cytostatic; neuroprotective; antidepressant; nootropic; CC antiparkinsonian; and immunostimulant. The proteins and polynucleotides criminates or antagonists of a protein and for the treatment and diagnosis concording them can be used in gene therapy, antisense therapy and vaccine composition. The proteins and polynucleotides are useful for screening for confiscions associated with the activity of a protein e.g. inflammation, criminated arthritis, septic shock, pancreatitis, cardiac dysfunction, infections, autoimmunity, genetic diseases, haematopoietic disorders, cardiac anaphylaxis, viral, bacterial, HIV and fungal confiscions, platelet disorders, thrombocytopaenia, wounds, burns, ulcers, chinitis, asthma, diabetes, cancer, multiple sclerosis, depression, cc neurological disorders, parkinson's disease, neurodegenerative and cc neurological disorders, cancer, multiple sclerosis, depression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1671 BP; 361 A; 537
                                                                           CACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAA
                                                                                                                                                                                                     AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                     ceceaerreacadridaeadaaceceasaacerrecadecerregecreadecreadecade
                                                                                                                                                                                                                                                                                                                               CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                           crcaaddadaradaadcrrcadcrdaagrcrcadccadcdardaccrcccccarcrca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAAGTCTCTATTCTCTCACCTAACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTACTATGCCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cernándechéchédirindadichtnehedecadhicachácháchdechédiridencaachac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chác rida hocha i ha rida ha ha ceach ceach ria crisc ceanta a ridar a chach ridar a c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGAATGGTGCTGGTCTGCTCCAACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             decadecererererakeceaaracedanederrerereketekerekerekerekereke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n polynucleotides encoding polypeptides, useful for diagnosis of e.g. cancer, ulcers and HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   685-686; 1217pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .CTACCTĠĊĊĠŦĊŦĊĊĠŦĠĊĀĀĊĊĊĀĊĠĠĊŦĠĊĊĠĠĀĀŦĊĊĊĀĊĀĊŤĊĠŤĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67.1%;
99.8%;
                                                                                                                                                                 rcctacaatectecttgteeetgggaggeeaggageaagegeeagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1271.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ċ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424 G; 349 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the
                                              996
                                                                                                      690
                                                                                                                                                                 936
                                                                                                                                                                                                                                                                                        876
                                                                                                                                                                                                                                                                                                                                                   570
                                                                                                                                                                                                                                                                                                                                                                                                               816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
RESULT 12
ADO24565
ID ADO245
XX AC ADO245
XX ID ADO245
XX ID ADO245
XX ID ADO245
XX ID ADO265
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                        osteopathic; vasotropic; immune related disease; inflammatory immune response; rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis; systemic lupus erythematosus; spondyloarthropathy; systemic sclerosis; sidiopathic inflammatory myopathy; Sjogren's syndrome; systemic vasculitis; sarcoidosis; autoimmune haemolytic anaemia; autoimmune disease; immune-mediated skin disease; bullous skin disease; rythema multiforme; contact dermatitis; psoriasis; lymphadenopathy;
                       Homo sapiens
                                                                                                                                                                                                                                                                                                                               human; PRO; antianaemic; antiarthritic; antiinflammatory; antipsoriatic; antirheumatic; dermatological; immunostimulant; immunosuppressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PRO7347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO24565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO24565 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGGGCTCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGGGCTCCACATG 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rccárcescaáccasserásserececasaarcassecescerritacesseresairitstac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTGCCTTGCCTCCCAGAGCCTG 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chárdodakohocrtodakahdakorodorrindrohdodocotridorridotordakahdakorrid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGĀCTTCTGCTCCTTGAĀGCTGGĀGCĀGTGCCĀCTCĀGĀGGCCĀGCCTGCĀGCGGCĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGACTTCTGCTCGTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAA 1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTTTCGGGAĀGTCGGTCTGTGĀCĀGCCTTGGGCGGCGĀCĀCĀTGTCTĀCCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aragargaaargaaargaaararargagagaacreeracregagaaaaccaaaaccerege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAGATGAAATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĠŦĀĠĀĠŦĊŦĀĊŦĊĊŦŔŦĠŔŦŔĂŦĠĠŔĠĠĀĠĊĀĊĠĠĠĠĠĊŦĊŔŦŦĊĠŔŦĊŔĠĊĊĊŔĠĠĸĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding cDNA SEQ ID NO:204.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA; 3306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP
                                                                                                                disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1056
```

В Š 밁 Ś 밁 Ş 밁 Ś 밁 Ś 망 Ś 뭉 S 밁 Ś В

```
CC treating (MI) an inmune related disease in a mammal, by administering (CC (I), an agonist of (I), an antagonist of (I), or the antibody (VI); (9) CC diagnosing an immune related disease in a mammal, by detecting the level CC of expression of a gene encoding (I) in a test sample of tissue cells CC cells of the same cell type; (10) identifying a compound that inhibits CC the activity of (I); (11) identifying a compound (M2) that inhibits the CC minics the activity of (I); and (12) identifying a compound that inhibits the CC mammal, by administering (I) or its antagonist to the mammal. (I) has CC antianaemic, antiarthritic, antiinflammatory, antipsoriatic, osteopthic and vasotropic activities. (I) and (VI) are useful for CC diagnosing an immune related disease in a mammal. (II) is useful for CC diagnosing an inflammatory immune response in a mammal. (VI) is useful for CC diagnosing an inflammatory immune response in a mammal. (VI) is useful for CC diagnosing an inflammatory immune response in a mammal. (VI) is useful for CC disease disorder chosen from rheumatoid arthritis, osteoarthritis, spondyloarthropathies, systemic solerosis, idiopathic inflammatory myopathies, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune or immune multiforme and contact dermatitis, psoriasis, lymphadenopathy, splenomegaly and leukopaenia. The present sequence encodes a human PRO protein from the present invention.
                                                                                                          밁
                                                                                                                                         8
                                                                       δ
                                                                                                                                                                               밁
                                                                                                                                                                                                                                                 Matches 1211;
                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes an isolated human PRO polypeptide (I). Also described: (I) an isolated PRO nucleic (II) acid encoding (I); (2) a vector (III) comprising (II); (3) a host cell (IV) comprising (II); (4) producing (I); (5) a chimeric molecule (V) comprising (I) fused to a heterologous amino acid sequence; (6) an antibody (VI) which specifically binds to (I); (7) a composition of matter comprising (I), an agonist of (I), an antagonist of (I), or (VI) in combination with a carrier; (8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated PRO polypeptide e.g. PRO37544, PRO69493, PRO87327 capable of stimulating an immune response, useful for treating such as rheumatoid arthritis, psoriasis, and leukopenia.
                                                                                                                                                                                                                                                                                                                     Sequence 3306 BP; 737 A; 950 C; 821 G; 746 T; 0 U; 52 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-420080/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Abbas A, Bodary S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-NOV-2002; 2002US-0425931P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-NOV-2003; 2003WO-US036002
                                                                                                                                              151
                                                                                                                                                                                                                91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; SEQ ID NO 204; 326pp; English.
                                                                                                                                                                                                              GTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCA 150
   CAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTC
                                                                 AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGGCTGCCGGAATCCCCACACTCGTC
                                                                                                                                            GGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGG
                                                                                                                                                                             GTGCTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCA
                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                 52.4%;
82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clark H,
                                                                                                                                                                                                                                                 ,
,
                                                                                                                                                                                                                                                 Pred. No. 4.7e-251;
0; Mismatches 52;
                                                                                                                                                                                                                                                                                    Score 992.8; DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schoenfeld J,
                                                                                                                                                                                                                                                 Indels 207;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                etc,
diseases
                                                                                                          1282
                                                                                                                                                                           1222
   330
                                      1342
                                                                         270
                                                                                                                                          210
                                                     밁
                                                                                  δ
                                                                                                                        В
                                                                                                                                                       S
                                                                                                                                                                                          밁
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                        2096
                                                                                                                                                           1231
                                                                                                                                                                                          2036
                                                                                                                                                                                                                                                                 1976
                                                                                                                                                                                                                                                                                                  1111
                                                                                                                                                                                                                                                                                                                                     1916
                                                                                                                                                                                                                                                                                                                                                                                                            1856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1736 NNNNNNNNNNNNNATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1403
                                                                                                                                                                                                                                                                                                                                                                                                                                           991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             331
GGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAAGGCTGTGAAGATGTC
                                                                            TCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTAC
                                                                                                                                            CAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCCTTGCCTTGCCTCCCAGAGCCTG
                                                                                                                                                                                                                                                                                                                                                                        AATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGATCCTT 1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATAGATGAAATGAAATGAAAACCCCTGGC
                                                                                                                                                                                                                  GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                           AGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAG 1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACAAGAACACAAGCAGGAA 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCACTTCACAGTGACAGAACNCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTC 1402
                                                      TCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTAC
                                                                                                                                                                                                                                                                GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1735
                                                                                                                                                                                          2095
                                                                                                                                                                                                                             1230
                                                                                                                                                                                                                                                                                                1170
                                                                                                                                                                                                                                                                                                                                     1975
                                                                                     1350
                                                                                                                        2155
                                                                                                                                                         1290
                                                                                                                                                                                                                                                                                                                                                                                                           1915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         450
                    1410
                                                                                                                                                                                                                                                                 2035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1522
```

```
The invention relates to human cDNA sequences that encode human secreted CC proteins. The invention also relates to an antibody that specifically CC binds to a polypeptide of the invention and a method of binding the CC polypeptide to an antibody. The polynucleotides are useful for expressing the entire secreted proteins which they encode and for distinguishing the CC thuman tissues and cells from non-human tissues and cells, and for CC distinguishing between human tissues and cells that do or do not express CC the polynucleotides comprising the cDNAs. The polynucleotides and CC polypeptides are useful in forensic procedures or diagnostic procedures to identify individuals with genetic diseases resulting from abnormal CC expression of the genes corresponding to the cDNAs. The sequences are calso useful in gene therapy to control or treat genetic diseases. This sequence represents a human secreted polynucleotide of the invention. CC Note: The sequence data for this patent did not form part of the printed consponding to the cDNAs are supprised to the printed consponding to the control of the printed consponding to the control of the printed control control control control control control to the printed control co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-DEC-1998;
09-FEB-1999;
21-JUN-2000;
15-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 262; 113pp;
                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated polynucleotide encoding secreted polypeptide, useful gene therapy, or in diagnostic procedures to identify individuals genetic diseases resulting from abnormal expression of the genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dumas Milne Edwards
Duclert A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; secreted protein; gene; ss; genetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human secreted polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004110939-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADP19006 standard; cDNA; 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2004-440404/41.
)B; ADP19411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGATTTGTGAĆAĆAĆAĠĀCTĀTĀTĊĊĀĞTĀĊĊĊĀĀĀĊTĀČTGTTĊĊTTĊĀĀĀĀĠĊĊĀĠĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ceaercreteereserecaeacreaerrectraectrecaegareseatreceraec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; 98WO-IB002122.
; 99WO-IB000282.
; 2000WO-IB000951.
; 2000US-00663600.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-00978360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bougueleret L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #262
                                                                                                                                                                                                                                                                                                                                                                                             English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jobert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clusel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                for
having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2335
```

```
δ
                                                 밁
                                                                  5
                                                                                            멍
                                                                                                             8
                                                                                                                                        밁
                                                                                                                                                         δ
                                                                                                                                                                                  밁
                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 948;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
    902
                         929
                                                                                                                  809
                                                                                             782
                                                                                                                                         722
                                                                                                                                                            749
                                                                                                                                                                                    662
                                                                                                                                                                                                           689
                                                                                                                                                                                                                                 602
                                                                                                                                                                                                                                                       629
                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                  569
                                                                                                                                                                                                                                                                                                                         482
                                                                                                                                                                                                                                                                                                                                                509
                                                                                                                                                                                                                                                                                                                                                                       422
                                                                                                                                                                                                                                                                                                                                                                                           450
                                                                                                                                                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                                                                        390
                                                                                                                                                                                                                                                                                                                                                                                                                                                             302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N
             AAATAGATGAAATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                          AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                              AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                      CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTTCCTCTTTTGCTCCCCGGGTACGAN
                                                                                                    | CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAG
                                                                                                                                                AAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGCAGACTGAGACTCAGAGC
AAATAGATGAAATGAATATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                  AAGAGGGGCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGGAAGGGAAAGCAGGAAG
                                                                                                                                                                                                                          AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGG
                                                                                                                                                                                                                                          AGCACAAGCAGGAGCAAGGAGTTGGAGCACGAGGAGCAGGAGCACAAGAAGCACAAGGAGCACG
                                                                                                                                                                                                                                                                      ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAG
                                                                                                                                                                                                                                                                                   ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTTGGAGGCCAGGAGCAAGCGCCAG
                                                                                                                                                                                                                                                                                                                  CACCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCCTCAGCA
                                                                                                                                                                                                                                                                                                                                CACCCCACTTCACAGTGACAGACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA
                                                                                                                                                                                                                                                                                                                                                               TCTCAAGGAGATAGAASCTTCAGCTGAAGTCTCACCCACCAGATGACCTCCCCCATCT
                                                                                                                                                                                                                                                                                                                                                                               CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCCAGCCAGTCTCTATTCTCTCWCCTAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                          CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       cccrrarisccriccrissrrir sasircriric receasir reactactac cerriscric caacca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGCTGGACCAATATGAAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGGCAGARACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCAGCCCTCTCTCCTACCGAATACCAACGCTTCTTCGCACTGCTGACCTCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGCAGCCCTCTCTCCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGCTGCTGCCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGCTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 937.6; DB 12;
Pred. No. 9.9e-237;
3; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                  928
                                           901
                                                                                       841
                                                                                                                                   781
                                                                                                                                                         808
                                                                                                                                                                              721
                                                                                                                                                                                                    748
                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                889
                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                             628
                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                          568
                                                                                                                                                                                                                                                                                                                                                                                     508
                                                                                                                                                                                                                                                                                                                                                                                                                                  449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             389
                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
```

RESULT 14
AAX97739
ID AAX97
XX

BP; 258 A;

294 C;

227 G;

180 T; 0 U;

AAX97739 standard; DNA; 964 ВP

```
Ś
                                                                                                                                                                                                         밁
                            밁
                                                  5
                                                                                     밁
                                                                                                               5
                                                                                                                                               밁
                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 948; Conserv
                                                                                                                                                                                                                                                                                                                                                      This sequence represents an extended human secreted protein coding sequence of the invention. The secreted proteins can be used in treating or controlling a variety of human conditions. The secreted proteins may act as cytokines or may affect cellular proliferation or differentiation or may act as immune system regulators, haematopoiesis regulators, tissue growth regulators, regulators of reproductive hormones or cell movement or have chemotactic/chemokinetic, receptor/ligand, anti-inflammatory or tumour inhibition activity. The DNAs can be used in forensic procedures to identify individuals or in diagnostic procedures to identify individuals or in diagnostic procedures to identify individuals or in diagnostic procedures to identify the extended cDNAs. They are also useful for constructing a high resolution map of the human chromosomes. They can also be used for gene therapy to control or treat genetic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-FEB-1998;
13-APR-1998;
10-AUG-1998;
                                                                                                                                                                                                                                                                                                                                Sequence 964 BP; 258 A; 294 C; 227 G; 180 T; 0 U; 5 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 genetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Secreted protein; human; cytokine; cellular proliferation; cell movement cellular differentiation; immune system regulator; anti-inflammatory; haematopoiesis regulator; tissue growth regulator; tumour inhibitor; reproductive hormone regulator; chemotaxis; chemokinesis; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 377; 516pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9931236-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bougueleret L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Extended human secreted protein coding sequence, SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX97739;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1999-385906/32.
DB; AAY36055.
                             182
                                                          210
                                                                                        122
                                                                                                                   150
                                                                                                                                                 62
                                                                                                                                                                             90
                                                                                                                                                                                                                                       30
                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease; ss.
                                                                                                                                                                GGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCC
CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT
                                                        GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                         AGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG
                                                                                                                                                 GGTGCTGCTCCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCC
                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0069957P.
98US-0074121P.
98US-0081563P.
98US-0096116P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-IB002122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Duclert
                                                                                                                                                                                                                                                                                  49.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ņ,
                                                                                                                                                                                                                                                                     u
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proteins
                                                                                                                                                                                                                                                                  Score 937; DB 2; Pred. No. 1.4e-236; 3; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dumas Milne Edwards
                                                                                                                                                                                                                                                                     ب
                                                                                                                                                                                                                                                                                                Length 964;
                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cell movement;
                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                         61
329
                                                        269
                                                                                        181
                                                                                                                   209
                                                                                                                                                 121
                                                                                                                                                                               149
                             241
```

```
밁
                                                       Ś
                                                                            밁
                                                                                            S
                                                                                                                     밁
                                                                                                                                       Ś
                                                                                                                                                             片
                                                                                                                                                                               S
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
 밁
              $
                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                      842
                                                          869
                                                                                                  809
                                                                                                                     722
                                                                                                                                         749
                                                                                                                                                             662
                                                                                                                                                                                 689
                                                                                                                                                                                                     602
                                                                                                                                                                                                                         629
                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                  242
                  929
                                                                              782
                                                                                                                                                                                                                                                               569
                                                                                                                                                                                                                                                                                                       509
                                                                                                                                                                                                                                                                                                                           422
                                                                                                                                                                                                                                                                                                                                              450
                                                                                                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                      390
                                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                                                                                                                                                                              330
             AAATAGATGAAATGAATGAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                  AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                              CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAG
                                                                                                                       AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGCAGG
                                                                                                                                                                                                                                            ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAG
                                                                                                                                                                                                                                                             ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAG
                                                                                                                                                                                                                                                                                                       CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA
                                                                                                                                                                                                                                                                                                                                       ANATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                       AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                               CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAM
                                                                                                                                                                                                     AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGGCCGACACAAGAACACAAGCAGG
                                                                                                                                                                                                                                                                                    CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA
                                                                                                                                                                                                                                                                                                                           TCTCAAGGAGATAGAASCTTCAGCTGAAGTCTCACCCACACAGATGACCTCCCCCATCT
                                                                                                                                                                                                                                                                                                                                                                    CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCCAGCCAGTCTCTATTCTCTCWCCTAACAC
                     983
                                        901
                                                                               841
                                                                                                                       781
                                                                                                                                          808
                                                                                                                                                              721
                                                                                                                                                                                  748
                                                                                                                                                                                                     661
                                                                                                                                                                                                                         889
                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                628
                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                        568
                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                508
                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                       449
                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                               389
                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
```

```
RESULT 15
                                                                                                      canine microarray; drug screening; toxicity assay; environmental pollutant; cellular response; gene expression toxic response; liver necrosis; facty liver disease; protein adduct formation; hepatitis; dog; ds.
                            05-MAY-2003; 2003WO-US013853
                                                                                      Canis familiaris
                                                                                                                                                        Novel canine microarray-related DNA sequence SeqID5141
                                                                                                                                                                           21-OCT-2004
                                                                                                                                                                                               ADQ53839
                                                                                                                                                                                                                 ADQ53839
                                                                                                                                                                                                                 standard;
                                                                                                                                                                           (first
                                                                                                                                                                                                                  DNA;
                                                                                                                                                                           entry)
```

profile;

03-MAY-2002; 2002US-0377240P

```
뭐
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention is related to a novel isolated canine nucleic acid CC sequences and the construction of canine microarrays containing a CC significant portion of the canine genome. The isolated canine nucleic acid CC acid sequences of the invention may be useful for drug screening and CC acid sequences of the invention is therefore useful for assessing the CC impact, including toxicity, of a compound, pharmaceutical agent or CC environmental pollutant on a cell or living organism. The methods are CC disease state. The sequences are useful as diagnostic agents or markers are expression profile. It is also useful as diagnostic agents or markers are expression or activity. The database is useful for compound expression or activity. The database is useful for conducting electronic Northerns that allow the user to determine that the producing electronic Northerns that allow the user to determine the cell determination of the abundance or expression level of a given gene in a similarity of a toxic response to one or more individual compounds. The methods are useful for determining the cC disease, protein adduct response to one or more individual compounds. The pathologies such as those of the liver (liver necrosis, fatty liver heart, brain or testes, or other pathologies associated with at least one the potential cellular pathways influenced, induced or modulated by the compound or test agent due to the similarity of the expression profile compared to the profile induced by a known toxin, The present sequence is compared to the profile induced by a known toxin, The present sequence is production of a canine microarray of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 695 BP; 157 A; 209 C; 169 G; 159 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 5141; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid molecule, useful for drug screening and toxicity assays or for assessing the impact, including toxicity, of a compound, pharmaceutical agent or environmental pollutant on a cell or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-561890/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diggans JC, Porter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             living organism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GENE-) GENE LOGIC INC. (PFIZ) PFIZER PROD INC.
                                                                                                                                     1417
                                                                                                                                                                                                                                                                         1297 GGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGG 1356
                                                                                                                                                                                                                                                                                                                                                                                         1237
                                                                                                                                                                                                                                                                                                                                                                                                                                       1177 TTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGCAACAACGC 1236
                                                                                                                                                                               181
                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                              61 GĂCĂGCTCCĂCĂĂĂĂCĂĆCTTCATCĂGCCCCTTGCTCATAGCCCĂGĂGCATGTCCĂTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           575;
                                                                                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              h 25.3%; Score 479.2; DB 13; Length 695; Similarity 82.7%; Pred. No. 8.2e-116; Todels 11;
                        TGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGCAGTGTCTG 1536
récedertédertéchagachgahrréctraderréchaggargegeartrécéchacchagair 300
                                                                                                         TCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATT 1476
                                                                                                                                                           CTCCGCĂTGGĂĊTTCTGGTGTGCCCGACTAGCCACCAĀGGGCTGTGĀAGĀTGTTCGAGTG
                                                                                                                                                                                        CTCCACATGGACTTCTGGTGTGCCCGGGTTGCCACGAAAGGCTGTGAAGATGTCCGAGTC 1416
                                                                                                                                                                                                                                             ricigetecergaagetegaacagreecacreagaggecarentgeagegeagetegreng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11; Gaps
                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                 60
```

В

밁 Ś 밁 δ

Search completed: March Job time : 1062 secs 7, 2005, 15:17:14

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
   8
10
11
12
12
13
14
14
16
16
18
19
                                                                                                                                                                                                                                                                                                               Pred. No. is th score greater t and is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
Bd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              score:
                                                                                                                                                                                                                                                      Score
   1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-559-013E-23
1895
1 gttagaggcggctto
                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                              is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
   100
99
91
78
67
67
67
67
67
61
228
27
27
27
27
27
21
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OLIGO_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapop 60.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4390206 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N_Geneseq_16Dec04:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gttagaggcggcttgtgtcc.....tgttgatcttcaaaaaaaa 1895
                                                                                                                                                                                                                                                                                                                                                           geneseqn2003as:*
geneseqn2003bs:*
geneseqn2003cs:*
geneseqn2003ds:*
geneseqn2004as:*
geneseqn2004as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                geneseqn2001bs:*
geneseqn2002as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       geneseqn2000s:*
geneseqn2001as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                      geneseqn2002bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          geneseqn1980s:*
                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7,
   2005, 17:40:21; Search time 1053 Seconds (without alignments) 10653.286 Million cell u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                      멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2959870667
                                                                                                                      10
                                                                                                                                                                     822365
   888298972
                                                                                                                                             10
                                                                                            ADA39940
ADC73578
ADD37623
ADA56130
AAH99858
ADO24565
AAX97739
                                                                                                                                                                                                     AAD08658
ABT14679
AAZ50927
             ABZ72003
ACH49259
AAV88163
ABZ71923
ABZ71705
                                                                        ADP19006
ACH27630
                                                                                                                                                                              AAX06785
AAZ24890
                                                                                                                                                                                                                                                      Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60.0
                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ltd.
Aad08658 Human can
Abt14679 Human pro
Abz19677 Human pro
Aax06785 Human adu
Aaz24990 Human sec
Ada3940 Human sec
Add3940 Human sec
Add37523 Human sec
Add56130 Gene enco
Aah99588 Human pro
Aab9958 Human pro
Aab91306 Human sec
Add21665 Human sec
Add21665 Human sec
Ach27630 Human adu
Abz72003 Human ful
Ach49559 Human ful
Ach49559 Human can
Abz71923 Human can
Abz71923 Human can
Abz71923 Human can
Abz71923 Human can
                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cell updates/sec
                          o o
                                                                                                                                                                                . . . . . . . . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဂ ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 0 · 0
   00000000000
                                                                                                                                72352
77834
110000
198073
                                                                                                                                                                              20 13 66 4 66 4 66 6 7 3 8 6 6 6 7 3 8 6 6 6 7 3 8 6 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 6 7 3 8 7 3 8 6 7 3 8 7 3 8 6 7 3 8 7 3 8 6 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3 8 7 3
  252
307
334
367
378
378
440
603
603
711
963
   ADA45034
ADA45049
ADB053839
ADA951553
ADD08665
ADD08665
ADD08665
ADD08666
ADE63335
ADD08666
ADE714665
ADD08666
ADE714665
ADD08661
ADA9508423
ADD08661
ADA9508423
ADD08661
ADA9508423
ADD08661
ADD08661
ADD1111
ADN98242
ADD01111
ADN99242
ADD01111
ADN99242
ADD01111
ADN99242
ADD01111
ADN99242
ADD01111
ADD011335
ADD011335
ADD013318
ADD0133318
ADD013318
ADD0133318
ADD01333318
ADD01333318
ADD0133333318
ADD0133318
ADD013333333318
ADD013333333318
ADD013333333318
ADD01333333334
  ADO35812
AAS63215
AAS87758
 Aad08666 Human tes
Abt14666 Human can
Abt14666 Human can
Abt14666 Human can
Abt33554 Human gen
Aba33337 Human gen
Abd01111 Klebsiell
Abm8242 Arabidops
Abd01213 Klebsiell
Abm8242 Human cal
Abd01233 Klebsiell
Abd23602 Human cal
Add31027 Human cal
Add31027 Human cal
Add31025 Human cal
Add31025 Human cal
Add31026 Human cal
Add3103818 Human cal
Add39956 Human cal
Add39955 Human cal
Add39956 Human N-t
Add23372 Human sef
Abd6867 Human yen
Add97067 Mouse can
Add97067 Human gen
Add99068 Kidney di
Abx37455 Bovine Bd
Add00168 Kidney di
Abx37455 Human gen
Aac29942 Human sec
Abn22892 Human on
Ac669362 Phuman on
Ac669362 Human on
Ac669362 Human on
Ac669362 Human on
Ac669362 Human on
Ac669361 Human on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ada45034 Human pol
Aax51481 Human sec
Abz19899 Group III
Abn49513 Human spl
Adq53839 Novel can
Aax06795 Human sec
Ada45049 Human OY-
Abs51553 Human cDN
Aad08668 Human tes
Aad18664 Human tes
Aad180469 Human tes
Aad180420 Leukaemia
Aac76271 Human ORP
Acm40762 Tumour-as
Ade63335 Human gen
Abd333905 Mouse can
Aad08663 Human OY-
Aad08663 Human OY-
Aad08663 Human OY-
Aad08663 Human OY-
Aad08661 ht-3 RT-P
```

ť

	ç	;																																																																																	
<b>\$</b>	•	165 C 166	164	162	c 161			c 157			154	107	7 10 1	151	c 150	149	148	147	146	145	144	143	142	141	1 4	140	110	138	13/	127	136	135	3 (	134	c 133	132	, t	121	c 130	129	140	3 1	127	126	125	1.21	3 6	ا د	122	121	120	127	110	118	117	116	115	c 114	C 113	: :	1 1	111	1 1	۵	c 108	c 107		100	105	10	C 103	1	٠,	: :	_	99	96	c 97		95	2 .	94	
	į	18 18	18	19	19	19	19	19	10	19	19	19	1 9	, ,	10		19	19	2 (	19	<u>1</u> 9	19	19	19	19	, ,	,	19	19	, ,	19	19	, L	10	19	19	, T	- 1	10	19	4	, ,	1 1	19	19	ΕT	L L		10	19	19	, L		1,0	3 1	19	19	19	19	19	-	· _	· .	10	-	15	TS	• •	1.	1.		<u></u>			-,	_	_	_	_	19		_	
	41	0.9 29 10	9 20	0 348101	0 289190	0 110000	0 110000	0 110000	110000	.0 103471	.0 100779	.0 100267	.0 72705	63588	59458	0 09458	0 4/01/0	36241	86187	0 20100	0 10993	0 10450	1.0 9765	1.0 9759	1.0 9759	1.0 9759	1.0 9759	1 0 0750	1.0 9757	1.0 9661	1 0 0000	1.0 9588	1.0 9120	1.0	1 0 6490	1.0 6279	1.0 6160	1.0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.0 5178	1.0 5076	۰	٠,	, د	_		_																																				
	3 AAC	10 AC	6 AAC	12 AD	12 AD	10 AC	6 ABT	AAA	4 AAI	12 AI	10 A	6 AB	11 A	8 AB:	13 A	13 A	A	10 A	10 A	, <u>.</u>	, o	л с 2 <u>2</u>	ا د د د	10																																																											
	13481	ACC83209	93267 96884	Q97146	ADH77486_08	F67367_22	01503 08	(96733_08	(95240 08	Q97668	TF65386 6	11032	CN45158	857150	DR67037	BD33282	CN44072	DB74385	DG37080	K69375	871127	248249	5400 TVG	20100101	DCDR465	A08043	T89642	10000	097696	3L09504	IDG37082		3L09782	1BZ67665	3109392	COCCO	ADJ12530	BL33027	HS/8/32		AC74090	AS70245	AS72828	HOBZIZ3	TOO TO	ASK8170	ADG28471	BL09783	DE62/3/	100010	HNTORTO	DM19259	ADL31072	AK94374	AC91322	91681	5110000	300000	797764	AAH1 6000	ADEO9933	AAS85132	AAC66902	ABL09393	ABL09505	TEREFERENCE	PCNSOS	ACN39007	ACA20568	AB215642	1000000	DD00000	ACA39756	ADF00423	ACA44709	ACN38532	10 h6 6 Hrus	AAA99404	AMC / 6384	3 33076364	AAS78277		
	Aac	Aaı Ac	Aa	<b>4</b> 4	0.0	- G	CO	0 (	2	<b>3</b> 0	, At		. A.	ž .						₽	A	A			<b>&gt;</b>	• 5	<b>-</b> 1	Þ	<b>1</b> 0	•		<b>'</b>	ı							•																																											
	13481 Human	Aas96884 Human STA	с93267 Нитап	bd33143 Muri	Continuation (23	ntinuation	ntinuation	intinuation	ruda 1998 Worl	Continuation (7 of	t11032 Huma	Cn45158 Hum	0857150 Huma	TULO / US / MOU	TOWN YOUR COMME	The cock that	ACD44073 May	Adb74385 Mice	Ada 370 BO Mou	ak69375 Hima	as71127 DNA	az48249 Rube	Abx10994 Rul	Adg28462 Rut	aa08043 Rube	aceybaz inte	TIL GOO'CHE	a097686 The	D109504 Dro	P100101 Ve	Add 7082 Ve	b109782 Dro	TUE 699 HU	D100000 010	b109392 nm	Adj12530 DN	1013302/ Hum	PICTOR STAN	13878737 DATE	Aas74989 DNA	AAS/0245 DNA	MAN OZOZO DNA	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Aasaara Fra	Aas68170 num	AG928471 Rt	DIG FRIENTEN	This is a second	Adl 62737 Him	Abn59810 Nov	Adm19259 Nov	MG131072 Ft	TOTAL PARTY OF THE	Dale Of 274 The	Dacology III	Aah18516 Hill	Aaz09608 Hu	Aat33648 Ra	Aah16002 Hu	Ade09933 N	Md885132 DN	Aac66902 Hu	POLICEOUS DE	AP100303 1	Ab109505 T	Acn39383 7	Acn39007 1	Ta opposit	ACHOOSE D	Abz15642 A	Aas68454 D	Aca39756 P	AG100423 1	ACR44709 P	700000000000000000000000000000000000000	ACTIONS	Aaa99407 O	Aaa99404 B	Aac76384 H	Aas78277 DNA encod			
	sec	STA	n can STA	ne ca	(9 of	(9 of	(9 of	(9 Of	se can	(7 of	n bre	an gen	n gen	se can	ine ca	se gen	Opacte	se pra	10 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ייים לי	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 4	)	ella v	lla v	etiou	CTIOU	1 ( ) ( ) ( )	sophi l	dd rol	140414	aonh i 1	nan sec	TTITO	200	A fracm	an imm	ericod	011000	PTCCA	encod	encod	erread	00000	encod .	bella v	eophil	an ova	OF HALL	re him	/el hum	ıll leng	nan tul	nan pol	"all CDN	man con	ויים מכו	8 D21 1	ממח כתא	ovel DNA	A encod	man EXM	Trudoso	TTIMODO	Cacht: 1	Timonit- ac	Tumour-as	OKaryot	Drojes and De	יייי ליוניטל	DNA Ancod	Prokarvot	3acterial	cokaryot	rumour-as		יייים מיייי		מונכטם	NA encod			
	_														_										_	_	_		-	_			_	_	_			_			_	_			_	_	_	_		_	-	_		_	_	-	_	_	-	_	_	_	_	_	_		_	_		_	_	_		_	_	_	_	_	_	_			
	C 238	237	235	234	232	c 231	229	228	227	226	227	222	223	200	221	220	219	218	c 217	c 216	c 215	214	c 213	717	211	211	210	c 209		208	c 207	200	306	205	c 204	203	3 10 1	202	201	0.200		100	198	c 197	196		105	194	193 .	767	101	101	190	189	188	187	186	185	C 184		100	- 1	C 181	180	c 179	178	٠,	C 177	17(	17	17	1.	0 173	1,1	17	170	16	c 168					
700	238 18	18 18	18	18	232 18	231 18	229 18	18	1 2	18	1 6	1 t	, a	1 1	J (	3 (8	18	218 18	217 18	216 18	215 18	214 18	213 18	212 18	, E	, c	100	18	ΤA	1 6	18	18	, ,	1 8	18	18	, ,	1 .	18	18	Ļ		10	18	18	1-0	100	94 10	93 . 18	18	87	10	1.0	1 20	.1	18	18	- 18	184 18	TO TO TO		183	181	0 18	179 18	18	110 La	177	176 18	175 16	174 18	1/3 18	172 17	177	171	-	169 10	168 1	167				
78 0	238 18 0	18 0	18 0	18 0	232 18 0	231 18 0	229 18 0	18	180	18	1 6	1 6	200	1 1	3 2	30	18	218 18	217 18	216 18	215 18	214 18	213 18	212 18	τα	, c	100	18	τα	1 1	18	18		20	18		, ,	10	18	18	Ļ		10	18	18	100	100	94 10	93 . 18	18	78	100	1,	20 (		18	18	18	184 18	T00		183	181	18	179 18	18	10 L8	177	176 18	175 18	174 18	1/3 18	173	172	171 10	18	169 18	168 18	167 18				
239 18 0.9 663	238 18 0.9 657	18 0.9 648 18 0.9 657	18 0.9 645	18 0.9 622	232 18 0.9 621	231 18 0.9 605	229 18 0.9 597	18 0.9 597	18 0.9 597	18 0.9 597	18 0.9 597	18 0.9 597	18 0.9 597	10 0.9 588	18 0.9 550	18 0 0 550	18 0.9 547	218 18 0.9 525	217 18 0.9 528	216 18 0.9 522	215 18 0.9 520	214 18 0.9 518	213 18 0.9 514	212 18 0.9 504	18 0.9 504	10 0.9 502	18 0.9 502	18 0.9 503	18 0.9 49g	10 0.9 496	18 0.9 402	18 0.9 474	10 0.9 47,	18 0.0	18 0 9 47	18 0.9 47	10 0.9 47	10 00	18 0 9 46	18 0.9 46	10 U.9 45	10 0.9 44	19 000	18 0 9 30	18 0.9 37	18 0.9 34	05 10 0.9 32	94 19 00 32	93 . 18 0 9 35	92 18 0.9 24	24 0.9 24	01 10 0.9 24	10 0.9 24	180 0.0	18 0 0	18 0.9 52	18 0.9 2	-18 0.9 2	18 0.9 2	18 0.9 2:	10 U.Y	183 10 0.9 2	181 10 0.5	0 18 0 0	179 18 0.9 2	18 0.9 2	15 0.9 2	177 10 00	176 18 0 0 5	175 18 0.9 5	174 18 0.9 2	1/3 18 0.9 1	173 18 0.9 1	172 10 0.9 1	171 18 0.5	0 18 0 4	169 18 0.9 1	168 18 0.9	167 18 0.9				
233 18 0.9 663 5	238 18 0.9 657 12	18 0.9 648 6	18 0.9 645 5	18 0.9 622 5	232 18 0.9 621 5	231 18 0.9 605 5	229 18 0.9 597 6	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 588 1	18 00 500 6	189 0.0	18 0.9 547	218 18 0.9 535 5	217 18 0.9 528	216 18 0.9 523	215 18 0.9 520	214 18 0.9 518	213 18 0.9 514	212 18 0.9 504	18 0.9 504	10 0.9 502	19 0.9 502	18 0.9 500	18 0.9 498	10 0.9 496	18 0.9 406	18 0.9 474	10 0.9 4/4	18 00 474	18 0.9 475	18 0.9 471	10 0.9 471	1000	18 0 9 463	18 0.9 461	10 0.9 454	10 0.9 448	18 00 000	18 0 9 300	18 0.9 378	La 0.9 348	of 10 0.9 329	94 19 00 32/	93 . 18 0 9 357	92 18 0.9 244	18 0.9 244	01 10 0.9 244	10 0.9 244	18 0.0 244	18 0 0 244	18 0.9 244	18 0.9 244	18 0.9 244	18 0.9 227	18 0.9 227	227	183 16 0.9 227	181 10 0.3 22/	0 18 0 0 327	179 18 0.9 227	18 0.9 227	12' 18 0.9 227	177 10 00 22/	176 18 0 9 227	175 18 0.9 227	174 18 0.9 201	1/3 18 0.9 191	173 18 0.9 175	172 10 0.9 157	171 18 00 155	0 18 0 0 155	169 18 0.9 100	168 18 0.9 700	167 18 0.9 100				
233 18 0.9 663 5	238 18 0.9 657 12	18 0.9 648 18 0.9 657	18 0.9 645 5	18 0.9 622 5	232 18 0.9 621 5	231 18 0.9 605 5	229 18 0.9 597 6	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 597 4	18 0.9 588 1	18 00 500 6	189 0.0	18 0.9 547	218 18 0.9 535 5	217 18 0.9 528	216 18 0.9 523	215 18 0.9 520	214 18 0.9 518	213 18 0.9 514	212 18 0.9 504	18 0.9 504	10 0.9 502	19 0.9 502	18 0.9 500	18 0.9 498	10 0.9 496	18 0.9 406	18 0.9 474	10 0.9 4/4	18 00 474	18 0.9 475	18 0.9 471	10 0.9 471	1000	18 0 9 463	18 0.9 461	10 0.9 454	10 0.9 448	18 00 000	18 0 9 300	18 0.9 378	La 0.9 348	of 10 0.9 329	94 19 00 32/	93 . 18 0 9 357	92 18 0.9 244	18 0.9 244	01 10 0.9 244	10 0.9 244	18 0 9 244	18 0 0 244	18 0.9 244	18 0.9 244	18 0.9 244	18 0.9 227	18 0.9 227	227	183 16 0.9 227	181 10 0.3 22/	0 18 0 0 327	179 18 0.9 227	18 0.9 227	12' 18 0.9 227	177 10 00 22/	176 18 0 9 227	175 18 0.9 227	174 18 0.9 201	1/3 18 0.9 191	173 18 0.9 175	172 10 0.9 157	171 18 00 155	0 18 0 0 155	169 18 0.9 100	168 18 0.9 700	167 18 0.9 100				
18 0.9 663 5 АВV21703	238 18 0.9 657 12 ADM91175	18 0.9 648 6 ABTT11316	18 0.9 645 5 AAS87156	18 0.9 622 5 AAS78280	232 18 0.9 621 5 AAS79373	231 18 0.9 605 5 AAH64913	229 18 0.9 597 6 ABS10781	18 0.9 597 4 AAK10920	18 0 6 55 4 AAK36777	18 0.9 597 4 ABA29892	18 0.9 597 4 AAI42551	18 0.9 597 4 ABA62564	18 0.9 597 4 AAI17628	18 0.9 588 12 ACH69097	18 0 50 6 AAD31375	18 0 0 EEO C 33207851	18 0.9 547 5 3300000	218 18 0.9 535 E 3555531	217 18 0.9 526 5 AAS/1834	216 18 0.9 522 5 3053531	215 18 0.9 520 10 2005332	214 18 0.9 518 5 23066250	213 18 0.9 514 12 20073601	212 18 0.9 504 12 ADNOS624	18 0.9 504 12 ADO00193	16 0.9 502 12 ACH74370	18 0.5 502 12 ACH73203	18 0.9 500 10 2001300	18 0.9 498 5 AASB1455	16 0.9 496 5 AAS77936	18 0.9 406 5 3503000	18 0.9 474 5 AACTOOD	10 0.9 474 5 AAS76690	18 00 454 0 ABZ36648	18 0.9 472 0 357262	18 0.9 471 13 ADS95175	10 0.9 471 13 ADS95013	18 0 0 ACH45506	18 0 463 0 10111111111111111111111111111111111	18 0.9 461 11 ADTO4743	16 U.9 454 2 AAT71576	10 0.5 446 5 AAS87825	18 0 0 10 ACD95643	18 0 9 300 10 110111	18 0.9 378 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	18 0.9 348 3 AAC57020	oe 10 0.9 329 3 AAC56980	94 18 0 52/ 5 ABN18876	93 . 18 0 9 337 6 110000000	92 18 0.9 244 6 ABS23211	21 L8 0.9 244 4 ABS49354	01 15 U.9 244 4 AAK23600	18 0.5 244 4 AAK49727	18 0 0 244 4 ABA39769	18 0 0 244 # AAL55620	18 0.9 244 4 3315500	18 0.9 244 4 ABATEORE	18 0.9 244 4 ANTOCOCO	184 18 0.9 227 13 ADT31065	18 0.9 227 13 ADJ21079	27 10 ADH47160	192 16 U.9 227 10 ADH47143	181 16 0.3 22/ 8 ACA03118	0 18 0 0 327 0 ACAUSTUL	179 18 0.9 227 9 ACALL 332	18 0.9 227 8 30311722	18 0.9 227 8 ACA11915	177 16 627 6 ABK39603	176 18 0 0 007 MDN39586	175 18 0.9 227 6 7072256	174 18 0.9 201 13 7053555	1/3 18 0.9 191 3 AAC16726	173 18 0.9 175 5 ABA12653	175 16 0.9 157 3 AAC13527	171 18 0 1 133 ADF57263	0 18 0 0 155 3 55570303	169 18 0.9 100 8 2007050	168 18 0.9 100 8 207253	167 18 0.9 100 8 20072202				
237 18 0.9 663 5 ABV21703 Abv2	238 18 0.9 657 12 ADM91175	18 0.9 648 6 ABTT11316	18 0.9 645 5 AAS87156	18 0.9 622 5 AAS78280	232 18 0.9 621 5 AAS79373	231 18 0.9 605 5 AAH64913	229 18 0.9 597 6 ABS10781	18 0.9 597 4 AAK10920	18 0 6 55 4 AAK36777	18 0.9 597 4 ABA29892	18 0.9 597 4 AAI42551	18 0.9 597 4 ABA62564	18 0.9 597 4 AAI17628	18 0.9 588 12 ACH69097	18 0 50 6 AAD31375	18 0 0 EEO C 33207851	18 0.9 547 5 3300000	218 18 0.9 535 E 3555531	217 18 0.9 526 5 AAS/1834	216 18 0.9 522 5 3053531	215 18 0.9 520 10 2005332	214 18 0.9 518 5 23066250	213 18 0.9 514 12 20073601	212 18 0.9 504 12 ADNOS624	18 0.9 504 12 ADO00193	16 0.9 502 12 ACH74370	18 0.5 502 12 ACH73203	18 0.9 500 10 2001300	18 0.9 498 5 AASB1455	16 0.9 496 5 AAS77936	18 0.9 406 5 3503000	18 0.9 474 5 AACTOOOD	10 0.9 474 5 AAS76690	18 00 454 0 ABZ36648	18 0.9 472 0 357262	18 0.9 471 13 ADS95175	10 0.9 471 13 ADS95013	18 0 0 ACH45506	18 0 463 0 10111111111111111111111111111111111	18 0.9 461 11 ADTO4743	10 0.9 454 2 AAT71576	10 0.5 446 5 AAS87825	18 0 0 10 ACD95643	18 0 9 300 10 1101111	18 0.9 378 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	18 0.9 348 3 AAC57020	oe 10 0.9 329 3 AAC56980	94 18 0 52/ 5 ABN18876	93 . 18 0 9 337 6 110000000	92 18 0.9 244 6 ABS23211	21 L8 0.9 244 4 ABS49354	01 15 U.9 244 4 AAK23600	18 0.5 244 4 AAK49727	18 0 0 244 4 ABA39769	18 0 0 244 4 AAL55620	18 0.9 244 4 3315500	18 0.9 244 4 ABATEORE	18 0.9 244 4 ANTOCOCO	184 18 0.9 227 13 ADT31065	18 0.9 227 13 ADJ21079	27 10 ADH47160	192 16 U.9 227 10 ADH47143	181 16 0.3 22/ 8 ACA03118	0 18 0 0 327 0 ACAUSTUL	179 18 0.9 227 9 ACALL 332	18 0.9 227 8 30311722	18 0.9 227 8 ACA11915	177 16 627 6 ABK39603	176 18 0 0 007 MDN39586	175 18 0.9 227 6 7072256	174 18 0.9 201 13 7053555	1/3 18 0.9 191 3 AAC16726	173 18 0.9 175 5 ABA12653	175 16 0.9 157 3 AAC13527	171 18 0 1 133 ADF57263	0 18 0 0 155 3 55570303	169 18 0.9 100 8 2007050	168 18 0.9 100 8 207253	167 18 0.9 100 8 20072202				

c 300 c 300 c 300 307 c 308 311	c 296 c 298 300 301	C C C 288 C 288 289 299 30 295	C CC 222278	2000 2000 2000 2000 2000 2000 2000 200		C C 240 C 2240 C C 2242 C 22443 C 22443 C 22443 C 2255 C 2555 C 2555
18 18 18 18 18 18	18 18 18 18	18 18 18 18	10000000000000000000000000000000000000	18 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	18 18 18 18 18 18 18	100 mm m
						666 669 679 681 681 743 743 754
8 ACA 13 AD 4 ABK 4 ABK 9 AAS 5 AAS 5 AAS 5 AAS 5 AAS 5 AAS	10 AB: 5 AAS:	10 ADG4: 6 ABN96: 13 ADR8: 6 ABS51: 8 ACA51: 12 ADN9: 12 ADO0:	5 AAS66 5 AAS71 5 AAS66 5 AAS66 3 AAA47 12 ADL1 12 ADL1 2 AAT663 5 AAS859 10 ADC1	5 AAS91 5 AAS69 5 AAS81 5 AAS70 5 AAS77 5 AAS87 5 AAS88 12 AD88 12 AD00 3 AAF11 12 ADP2	5 AAS 5 AAS 5 AAS 12 AD 112 AD 112 AD 112 AD 113 AAS 5 AAS 5 AAS 5 AAS 6 AAI 10 AD 110 AD 110 AD	5 ABV 13 AD 12 AD 16 ABS 6 ABS 12 AD 12 AD 12 AD 12 AD 12 AD 13 AS 5 AAS 5 AAS 6 ABS 6 ABS 5 AAS
ACA19022 ADS46033 ABK42676 ADB60832 AAS71111 AAS66293 ACA48714 AAS66375 AAS7179 AAS7179	Z83366 77087 75883 59354 88160 79632	ADCA5184 ADR96965 ADR83512 ABS51033 ACA51828 ADN98784 ADD000353 ADP28802	AAS66384 AAS71060 AAAS6350 AAAA7433 ADL12382 AAT66233 AAS85563 ADC12699 ADC12699 ADC43734	AAS6556 AAS61669 AAS69934 AAS81228 AAS71927 AAS87853 AAS77942 AAS88428 AAS77942 AAS88428 AAS77942 AAS88428	91722 87828 66348 66348 000447 74396 72025 71059 71059 87839 87839 343732	ABV27525 ADQ55795 ADQ55795 ADP23132 ABT11384 ABS62810 ADS000365 ADW98796 AAS79987 ACD93582 AAS67911 AAS77336 ABS62911 AAS62911
Aca19022 Prokaryot Ads46033 Bacterial Abk42676 Genomic s Ads60832 Connectiv Aas71111 DNA encod Aas66293 DNA encod Aca48714 Prokaryot Aas66375 DNA encod Aas71779 DNA encod Aas7179 DNA encod					•	
Aca1902 Ad8460 Abk4267 Abk6083 Aa87111 Aa86629 Aca4871 Aa86637 Aa87177	Abz833 Aas7708 Aas7588 Aas6935 Aas6935 Aas8816 Aas7963 Aas6628	AdC39716 numan sec AdG43738 Human N-a Abn96965 Gene #346 Adr83512 Human pol Abs51033 Human cDN Aca51828 Prokaryot Adn98784 Novel hum Ad000353 Novel human	Aas66384 DNA encod Aas71060 DNA encod Aas66350 DNA encod Aaa47433 Sequence Ad112382 Human ste Aat66233 Human HAP Aas85563 DNA encod Adc12699 Human GPC Adg43734 Human N-a	Aass 16.69 DNA encod Aass 16.69 DNA encod Aass 19.28 DNA encod Aass 19.28 DNA encod Aass 709.27 DNA encod Aass 779.42 DNA encod Aass 884.28 DNA encod Aass 884.28 DNA encod Addn 98.79 Novel hum Aaf 11.93 Aspergill Adp 291.31 Human sec	Aas91722 DNA encod Aas66348 DNA encod Aas66348 DNA encod Ad000447 Novel hu Adn98878 Novel hu Aas74396 DNA encod Aas72025 DNA encod Aas71059 DNA encod Aas71059 DNA encod Aas71051 Human ext Aas87839 DNA encod Aad943732 Human N- Ad943732 Human N-	Abv27525 Human pro Adq55795 Novel can Adq55795 Novel can Adp29132 Human sec Abt11384 Yeast sel Abs62810 Selected Add00365 Novel hum Adm198796 Novel hum Asr79987 DNA encod Acd93582 Human col Ass67701 DNA encod Ass77336 DNA encod Ass77336 DNA encod Ass77336 DNA encod Ass67701 DNA encod Ass67701 DNA encod Ass67701 DNA encod Ass67701 Selected Abs62919 Selected Abs64911 Human sec
2 Proka 33 Bact 6 Genom 2 Conne 1 DNA e 3 DNA e 4 Proka 5 DNA e 9 DNA e	66 Toxi 7 DNA e 3 DNA e 4 DNA e 6 DNA e 7 DNA e 7 DNA e	5 Human 38 Huma 5 Gene 12 Human 3 Human 8 Proka 8 Proka 84 Nove 53 Nove	4 DNA e 0 DNA e 0 DNA e 0 DNA e 3 Seque 82 Human 3 Human 3 DNA e 99 Huma	7 DNA e 9 DNA e 8 DNA e 7 DNA e 7 DNA e 8 DNA e 8 DNA e 8 DNA e 9 NOVe 9 Asper 9 Asper	as91722 DNA encod as867828 DNA encod as86348 DNA encod as66348 DNA encod Ad000447 Novel hum Adn98878 Novel hum as874396 DNA encod as872025 DNA encod as871059 DNA encod	5 Human pro 95 Novel car 32 Human sec 4 Yeast sel 6 Selected 6 Sovel hum 7 DNA encod 82 Human col 1 DNA encod 6 DNA encod 4 Yeast sel 9 Selectes
ryot erial ic s ctiv ncod ncod ryot ncod ncod	colog ncod ncod ncod ncod ncod	#346 #346 n pol cDN ryot l hum l hum	ncod ncod nce nce n ste HAP ncod n GPC n N-a	ncod ncod ncod ncod ncod ncod ncod ncod	ncod ncod ncod ncod l hum l hum ncod ncod ncod ncod ncod ncod ncod ncod	Human pro Human sec Human sec Yeast sel Selected Novel hum Novel hum DNA encod Human sec Selected Yeast sel Selected Human sec
0 000		0 000	0		0 0 0	00 00 0
			351 352 353 354 356 359		C 332 C 332 C 333 C 335 C 335	c 313 c 315 c 316 c 317 c 319 c 320 321 322 323 323
	369 1 370 1 371 1 372 1 373 1 374 1	360 360 363 363 3665 11	352 352 353 354 355 356 356 11		327 328 328 3329 1 3331 3332 1 3334 1 3336 1	
376 18 377 18 378 18 379 18 380 18 381 18 382 18 382 18 383 18	369 18 0. 370 18 0. 371 18 0. 372 18 0. 373 18 0. 374 18 0. 375 18 0.	360 18 0. 362 18 0. 363 18 0. 364 18 0. 365 18 0. 366 18 0. 367 18 0.	351 18 0. 352 18 0. 353 18 0. 354 18 0. 355 18 0. 356 18 0. 357 18 0. 359 18 0.		327 328 328 18 0 329 18 0 330 18 0 331 18 0 332 18 0 333 18 0 335 18 0 336 18 0 0 337 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 18 0 0 0 18 0 0 18 0 0 0 0 0 0 0 0 0 0 0 0 0	313 314 315 316 317 317 318 318 318 318 318 318 318 318 318 318
376 18 0.9 377 18 0.9 378 18 0.9 379 18 0.9 380 18 0.9 381 18 0.9 382 18 0.9 383 18 0.9 384 18 0.9 385 18 0.9	369 18 0.9 370 18 0.9 371 18 0.9 372 18 0.9 373 18 0.9 374 18 0.9 375 18 0.9	360 18 0.9 362 18 0.9 363 18 0.9 364 18 0.9 365 18 0.9 366 18 0.9 367 18 0.9	351 18 0.9 352 18 0.9 353 18 0.9 354 18 0.9 356 18 0.9 356 18 0.9 358 18 0.9		327 18 0.9 328 18 0.9 329 18 0.9 330 18 0.9 331 18 0.9 332 18 0.9 333 18 0.9 334 18 0.9 335 18 0.9 336 18 0.9	313 314 315 315 316 317 318 318 318 318 318 318 318 318
376 18 0.9 1359 10 377 18 0.9 1360 6 378 18 0.9 1360 6 379 18 0.9 1374 5 380 18 0.9 1374 5 381 18 0.9 1382 5 382 18 0.9 1387 5 383 18 0.9 1395 5 384 18 0.9 1395 5	369 18 0.9 1347 5 370 18 0.9 1356 5 371 18 0.9 1356 5 372 18 0.9 1356 5 373 18 0.9 1356 5 374 18 0.9 1356 5 375 18 0.9 1356 5	360 18 0.9 1314 10 362 18 0.9 1314 11 363 18 0.9 1314 13 364 18 0.9 1323 5 365 18 0.9 1326 5 366 18 0.9 1341 5 367 18 0.9 1341 5	351 18 0.9 1281 5 352 18 0.9 1287 5 353 18 0.9 1290 5 354 18 0.9 1290 5 355 18 0.9 1296 5 356 18 0.9 1296 5 357 18 0.9 1303 1 358 18 0.9 1303 5	18 0.9 1230 5 18 0.9 1231 5 18 0.9 1233 6 18 0.9 1238 6 18 0.9 1238 5 18 0.9 1263 5 18 0.9 1263 15 18 0.9 1266 5 18 0.9 1266 5 18 0.9 1266 5 18 0.9 1266 5	327 18 0.9 1189 5 328 18 0.9 1194 5 329 18 0.9 1206 5 330 18 0.9 1206 5 331 18 0.9 1206 5 332 18 0.9 1206 5 333 18 0.9 1206 10 334 18 0.9 1223 5 335 18 0.9 1223 5 336 18 0.9 1223 5 337 18 0.9 1223 5 338 18 0.9 1223 5 339 18 0.9 1224 5	313 18 0.9 1098 10 314 18 0.9 1104 5 315 18 0.9 1116 5 317 18 0.9 1120 5 318 18 0.9 1120 5 318 18 0.9 1122 5 319 18 0.9 1125 6 320 18 0.9 1136 12 321 18 0.9 1155 5 322 18 0.9 1152 5 323 18 0.9 1152 5 324 18 0.9 1167 5 325 18 0.9 1167 5 326 18 0.9 1179 5
376 18 0.9 1359 10 377 18 0.9 1360 6 378 18 0.9 1360 6 379 18 0.9 1374 5 380 18 0.9 1374 5 381 18 0.9 1382 5 382 18 0.9 1387 5 383 18 0.9 1395 5 384 18 0.9 1395 5	369 18 0.9 1347 5 370 18 0.9 1356 5 371 18 0.9 1356 5 372 18 0.9 1356 5 373 18 0.9 1356 5 374 18 0.9 1356 5 375 18 0.9 1356 5	360 18 0.9 1314 10 362 18 0.9 1314 11 363 18 0.9 1314 13 364 18 0.9 1323 5 365 18 0.9 1326 5 366 18 0.9 1341 5 367 18 0.9 1341 5	351 18 0.9 1281 5 352 18 0.9 1287 5 353 18 0.9 1290 5 354 18 0.9 1290 5 355 18 0.9 1296 5 356 18 0.9 1296 5 357 18 0.9 1303 1 358 18 0.9 1303 5	18 0.9 1230 5 18 0.9 1231 5 18 0.9 1233 6 18 0.9 1238 6 18 0.9 1238 5 18 0.9 1263 5 18 0.9 1263 15 18 0.9 1266 5 18 0.9 1266 5 18 0.9 1266 5 18 0.9 1266 5	327 118 0.9 1189 328 118 0.9 1194 329 118 0.9 1206 330 18 0.9 1206 331 118 0.9 1206 332 118 0.9 1206 333 118 0.9 1206 334 118 0.9 1223 335 118 0.9 1223 336 118 0.9 1223 337 118 0.9 1223 338 118 0.9 1223 339 118 0.9 1223	313 18 0.9 1098 10 314 18 0.9 1104 5 315 18 0.9 1116 5 317 18 0.9 1120 5 318 18 0.9 1120 5 318 18 0.9 1126 6 320 18 0.9 1136 12 321 18 0.9 1155 5 322 18 0.9 1152 5 323 18 0.9 1152 5 324 18 0.9 1152 5 325 18 0.9 1167 5 326 18 0.9 1167 5 327 18 0.9 1167 5
376 18 0.9 1359 5 AASB4438 377 18 0.9 1359 10 ADF59865 378 18 0.9 1360 6 AAD35225 379 18 0.9 1374 5 AAS66369 380 18 0.9 1378 5 AAS73459 381 18 0.9 1387 5 AAS73429 382 18 0.9 1387 5 AAS73016 383 18 0.9 1387 5 AAS77095 384 18 0.9 1395 5 AAS77941 385 18 0.9 1395 5 AAS77941	369 18 0.9 1347 5 AAS84788 370 18 0.9 1356 5 AAS79831 371 18 0.9 1356 5 AAS79835 372 18 0.9 1356 5 AAS66356 373 18 0.9 1356 5 AAS79330 374 18 0.9 1356 5 AAS92240 375 18 0.9 1356 5 AAS92240	360 18 0.9 1314 10 AAK99606 362 18 0.9 1314 11 ABD05686 363 18 0.9 1314 13 AD748908 364 18 0.9 1325 5 AAS77935 365 18 0.9 1326 5 AAS66286 366 18 0.9 1326 5 AAS69755 367 18 0.9 1341 5 AAS69179 368 18 0.9 1341 5 AAS69179	351 18 0.9 1281 5 AAS76684 352 18 0.9 1287 5 AAS73110 353 18 0.9 1287 5 AAS73976 354 18 0.9 1290 5 AAS91670 355 18 0.9 1296 5 AAS70688 356 18 0.9 1296 5 AAS70688 357 18 0.9 1396 5 AAS70687 358 18 0.9 1302 11 ABD05854 359 18 0.9 1303 5 AAS70697 359 18 0.9 1308 10 ACF70488	18 0.9 1230 5 AAS79418 18 0.9 1230 5 AAS79617 18 0.9 1231 5 AAS86648 18 0.9 1231 6 ABT07104 18 0.9 1238 8 ABX79982 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS79624 18 0.9 1266 5 AAS79624 18 0.9 1266 5 AAS77933 18 0.9 1266 5 AAS77933	327 18 0.9 1189 5 328 18 0.9 1194 5 329 18 0.9 1206 5 330 18 0.9 1206 5 331 18 0.9 1206 5 332 18 0.9 1206 5 333 18 0.9 1206 10 334 18 0.9 1223 5 335 18 0.9 1223 5 336 18 0.9 1223 5 337 18 0.9 1223 5 338 18 0.9 1223 5 339 18 0.9 1224 5	313 18 0.9 1098 10 314 18 0.9 1104 5 315 18 0.9 1116 5 317 18 0.9 1120 5 318 18 0.9 1120 5 318 18 0.9 1126 6 320 18 0.9 1136 12 321 18 0.9 1155 5 322 18 0.9 1152 5 323 18 0.9 1152 5 324 18 0.9 1152 5 325 18 0.9 1167 5 326 18 0.9 1167 5 327 18 0.9 1167 5
376 18 0.9 1359 5 AASB4438 377 18 0.9 1359 10 ADF59865 378 18 0.9 1360 6 AAD35225 379 18 0.9 1374 5 AAS66369 380 18 0.9 1378 5 AAS73459 381 18 0.9 1387 5 AAS73429 382 18 0.9 1387 5 AAS73016 383 18 0.9 1387 5 AAS77095 384 18 0.9 1395 5 AAS77941 385 18 0.9 1395 5 AAS77941	369 18 0.9 1347 5 AAS84788 370 18 0.9 1356 5 AAS79831 371 18 0.9 1356 5 AAS79835 372 18 0.9 1356 5 AAS66356 373 18 0.9 1356 5 AAS79330 374 18 0.9 1356 5 AAS92240 375 18 0.9 1356 5 AAS92240	360 18 0.9 1314 10 AAK99606 362 18 0.9 1314 11 ABD05686 363 18 0.9 1314 13 AD748908 364 18 0.9 1325 5 AAS77935 365 18 0.9 1326 5 AAS66286 366 18 0.9 1326 5 AAS69755 367 18 0.9 1341 5 AAS69179 368 18 0.9 1341 5 AAS69179	351 18 0.9 1281 5 AAS76684 352 18 0.9 1287 5 AAS73110 353 18 0.9 1287 5 AAS73976 354 18 0.9 1290 5 AAS91670 355 18 0.9 1296 5 AAS70688 356 18 0.9 1296 5 AAS70688 357 18 0.9 1396 5 AAS70687 358 18 0.9 1302 11 ABD05854 359 18 0.9 1303 5 AAS70697 359 18 0.9 1308 10 ACF70488	18 0.9 1230 5 AAS79418 18 0.9 1230 5 AAS79617 18 0.9 1231 5 AAS86648 18 0.9 1231 6 ABT07104 18 0.9 1238 8 ABX79982 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS79624 18 0.9 1266 5 AAS79624 18 0.9 1266 5 AAS77933 18 0.9 1266 5 AAS77933	327 18 0.9 1189 5 AAS87858 328 18 0.9 1194 5 AAS68938 329 18 0.9 1206 5 AAS6357 330 18 0.9 1206 5 AAS70917 331 18 0.9 1206 5 AAS770917 332 18 0.9 1206 5 AAS77459 333 18 0.9 1206 5 AAS77459 333 18 0.9 1206 10 ADG47735 334 18 0.9 1223 5 AAS71242 335 18 0.9 1223 5 AAS71528 336 18 0.9 1223 5 AAS71528 337 18 0.9 1223 5 AAS6364 337 18 0.9 1224 5 AAS67353 338 18 0.9 1224 5 AAS67833 338 18 0.9 1224 5 AAS67833	313 18 0.9 1098 10 ADF57967 314 18 0.9 1104 5 AAS81509 315 18 0.9 1113 11 ADS5544 316 18 0.9 1116 5 AAS85777 317 18 0.9 1116 5 AAS85777 318 18 0.9 1120 5 AAS85423 319 18 0.9 1120 5 AAS85423 319 18 0.9 1136 6 ABX97188 320 18 0.9 1136 12 ADN62032 321 18 0.9 1136 12 ADN62032 321 18 0.9 1155 5 AAS877857 322 18 0.9 1158 5 AAS877852 323 18 0.9 1167 5 AAS877857 324 18 0.9 1167 5 AAS877857 325 18 0.9 1167 5 AAS877847 326 18 0.9 1168 5 AAS877847
376 18 0.9 1359 5 AASB4438 377 18 0.9 1359 10 ADF59865 378 18 0.9 1360 6 AAD35225 379 18 0.9 1374 5 AAS66369 380 18 0.9 1378 5 AAS73459 381 18 0.9 1387 5 AAS73429 382 18 0.9 1387 5 AAS73016 383 18 0.9 1387 5 AAS77095 384 18 0.9 1395 5 AAS77941 385 18 0.9 1395 5 AAS77941	369 18 0.9 1347 5 AAS84788 370 18 0.9 1356 5 AAS79831 371 18 0.9 1356 5 AAS79835 372 18 0.9 1356 5 AAS66356 373 18 0.9 1356 5 AAS79330 374 18 0.9 1356 5 AAS92240 375 18 0.9 1356 5 AAS92240	360 18 0.9 1314 10 AAK99606 362 18 0.9 1314 11 ABD05686 363 18 0.9 1314 13 AD748908 364 18 0.9 1325 5 AAS77935 365 18 0.9 1326 5 AAS66286 366 18 0.9 1326 5 AAS69755 367 18 0.9 1341 5 AAS69179 368 18 0.9 1341 5 AAS69179	351 18 0.9 1281 5 AAS76684 352 18 0.9 1287 5 AAS73110 353 18 0.9 1287 5 AAS73976 354 18 0.9 1290 5 AAS91670 355 18 0.9 1296 5 AAS70688 356 18 0.9 1296 5 AAS70688 357 18 0.9 1396 5 AAS70687 358 18 0.9 1302 11 ABD05854 359 18 0.9 1303 5 AAS70697 359 18 0.9 1308 10 ACF70488	18 0.9 1230 5 AAS79418 18 0.9 1230 5 AAS79617 18 0.9 1231 5 AAS86648 18 0.9 1231 6 ABT07104 18 0.9 1238 8 ABX79982 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS79624 18 0.9 1266 5 AAS79624 18 0.9 1266 5 AAS77933 18 0.9 1266 5 AAS77933	327         18         0.9         1189         5         AASB7858         AasB7           328         18         0.9         1194         5         AAS68938         Aas68           329         18         0.9         1206         5         AAS66357         Aas66           330         18         0.9         1206         5         AAS70917         Aas70           331         18         0.9         1206         5         AAS78262         Aas70           332         18         0.9         1206         5         AAS77459         Aas71           333         18         0.9         1206         10         ADG43735         Aas7           334         18         0.9         1223         5         AAS71242         Aas7           335         18         0.9         1223         5         AAS71528         Aas7           336         18         0.9         1223         5         AAS76528         Aas6           337         18         0.9         1224         5         AAS87833         Aas6           339         18         0.9         1224         5         AAS87833         Aas64	313 18 0.9 1098 10 ADF57967 Adf 314 18 0.9 1104 5 AASB1509 AasB 315 18 0.9 1113 11 ABD05544 Abd 316 18 0.9 1116 5 AASB5777 AasB 317 18 0.9 1120 5 AASB5777 AasB 318 18 0.9 1120 5 AASB5423 AasB 319 18 0.9 1120 6 ABSY7158 Abx9 320 18 0.9 1136 6 ABX97152 AasB 321 18 0.9 1136 12 ADN62032 AdaB 322 18 0.9 1158 5 AAS72857 AasB 323 18 0.9 1158 5 AAS7752 AasB 324 18 0.9 1167 5 AAS66291 AasB 325 18 0.9 1167 5 AASB7847 AasB 326 18 0.9 1167 5 AASB7847 AasB 327 18 0.9 1168 5 AASB7847 AasB
376 18 0.9 1359 5 AASB4438 377 18 0.9 1359 10 ADF59865 378 18 0.9 1360 6 AAD35225 379 18 0.9 1374 5 AAS66369 380 18 0.9 1378 5 AAS73459 381 18 0.9 1387 5 AAS73429 382 18 0.9 1387 5 AAS73016 383 18 0.9 1387 5 AAS77095 384 18 0.9 1395 5 AAS77941 385 18 0.9 1395 5 AAS77941	369 18 0.9 1347 5 AAS84788 370 18 0.9 1356 5 AAS79831 371 18 0.9 1356 5 AAS79835 372 18 0.9 1356 5 AAS66356 373 18 0.9 1356 5 AAS79330 374 18 0.9 1356 5 AAS92240 375 18 0.9 1356 5 AAS92240	360 18 0.9 1314 10 AAK99606 362 18 0.9 1314 11 ABD05686 363 18 0.9 1314 13 AD748908 364 18 0.9 1325 5 AAS77935 365 18 0.9 1326 5 AAS66286 366 18 0.9 1326 5 AAS69755 367 18 0.9 1341 5 AAS69179 368 18 0.9 1341 5 AAS69179	351 18 0.9 1281 5 352 18 0.9 1287 5 353 18 0.9 1290 5 354 18 0.9 1290 5 355 18 0.9 1296 5 356 18 0.9 1296 5 357 18 0.9 1303 1 358 18 0.9 1303 5	18 0.9 1230 5 AAS79418 18 0.9 1230 5 AAS79617 18 0.9 1231 5 AAS86648 18 0.9 1231 6 ABT07104 18 0.9 1238 8 ABX79982 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS7983 18 0.9 1263 5 AAS79624 18 0.9 1266 5 AAS79624 18 0.9 1266 5 AAS77933 18 0.9 1266 5 AAS77933	327         18         0.9         1189         5         AAS87858         AAS87858         DNA           328         18         0.9         1194         5         AAS68398         AA868393         DNA           329         18         0.9         1206         5         AAS66357         AA866357         DNA           330         18         0.9         1206         5         AAS70917         AA870917         DNA           331         18         0.9         1206         5         AAS78262         AA877459         AA877459         DNA           332         18         0.9         1206         5         AAS71242         AA877257         AA871242         DNA           333         18         0.9         1206         10         ADG43735         AA871242         DNA           334         18         0.9         1223         5         AAS71242         AA871242         DNA           335         18         0.9         1223         5         AAS71528         AA871242         DNA           336         18         0.9         1224         5         AAS66364         AA866364         DNA           337 <td< td=""><td>313 18 0.9 1098 10 ADF57967 Adf57967 314 18 0.9 1104 5 AAS81509 315 18 0.9 1113 1 ABD05544 Abd05544 316 18 0.9 1116 5 AAS85777 Aas85777 317 18 0.9 1120 5 AAS85727 Aas85423 318 18 0.9 1120 5 AAS85423 Abs79628 319 18 0.9 1126 6 ABS77158 Abd06203 320 18 0.9 1136 6 ABS77152 Abs79752 321 18 0.9 1136 12 ADN62032 Aas72857 322 18 0.9 1155 5 AAS72857 Aas877852 323 18 0.9 1167 5 AAS66291 Aas66291 324 18 0.9 1167 5 AAS87647 Aas867847 325 18 0.9 1167 5 AAS87647 Aas867847</td></td<>	313 18 0.9 1098 10 ADF57967 Adf57967 314 18 0.9 1104 5 AAS81509 315 18 0.9 1113 1 ABD05544 Abd05544 316 18 0.9 1116 5 AAS85777 Aas85777 317 18 0.9 1120 5 AAS85727 Aas85423 318 18 0.9 1120 5 AAS85423 Abs79628 319 18 0.9 1126 6 ABS77158 Abd06203 320 18 0.9 1136 6 ABS77152 Abs79752 321 18 0.9 1136 12 ADN62032 Aas72857 322 18 0.9 1155 5 AAS72857 Aas877852 323 18 0.9 1167 5 AAS66291 Aas66291 324 18 0.9 1167 5 AAS87647 Aas867847 325 18 0.9 1167 5 AAS87647 Aas867847

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	/F /
	1188 1188 1188 1188 1188 1188 1188 118
880888888888888888888888888888888888888	
B ACA97984 B ACA971486 B ACCA97000 B ACCA97000 B ACCD16247 B ACCD16243 B ACCD2343 B ACCA971923 B ACCA971923 B ACCA971923 B ACCA971933 B ACCA98937 B ACCA98937 B ACCA984997 B ACCA984997 B ACCA984997 B ACCA984997 B ACCA984997 B ACCA987677 B ACCA98767 B ACCA9876 B ACCA9976 B ACCA9876 B ACCA9976 B ACCA9976 B ACCA9976 B ACC	
Aca97984 Human PRO Aca911486 Novel hum Aca9100 Novel hum Aca91100 Novel hum Aca9100 Novel hum Aca16247 Human sec Acc22065 Human sec Acc22065 Human sec Acc22065 Human sec Acc201343 Novel hum Aca17437 Human sec Acc98334 Novel hum Aca91293 Human sec Acc98371 Human sec Acc98371 Human sec Acc984992 CDNA enco Aca6847 CDNA enco Aca6847 CDNA enco Aca6847 CDNA enco Aca6941654 Human sec Acc11633 Human pRO Abx16736 Human pRO Abx16736 Human pRO Aca99126 Novel hum Acc11019 Human sec Acc11178 Human sec Acc11178 Human sec Acc116475 Human sec Acc1647809 Human sec Acc1647809 Human sec Acc164879 Human sec Acc1648989 Human sec Acc18299 Human sec Acc18299 Human sec Acc148900 Human sec Acc148900 Human sec Acc148909 Human sec Acc11247 Human sec Acc11247 Human sec Acc11264 Human sec Acc11264 Human sec Acc11264 Human sec Acc11803 Human sec	Novel cDNA (Human Novel Novel Novel Novel Novel Novel Novel Human Novel Human Human Human Novel Human Novel Human Novel Human
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	a a a a a a a a a a a a a a a a a a a
6625 6626 6626 6626 6632 6632 6632 6632	C 605  C 606  C 606  C 608  C 608  C 609  C 610  C 611  C 611  C 612  C 613  C 614  C 615  C 615  C 615  C 616  C 617  C 618  C 618  C 622  C 624  C 624
625 627 628 628 629 118 0 632 633 118 0 633 118 0 633 118 0 634 118 0 635 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 644 118 0 645 118 0 646 118 0 647 118 0 657 118 0 665 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 667 118 0 0 667 118 0 0 667 118 0 0 667 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 677 118 0 0 0 677 118 0 0 0 677 118 0 0 0 677 118 0 0 0	C 605  C 606  C 607  C 608  C 608  C 609  C 609  C 610  C 611  C
625 626 627 628 628 628 629 631 632 633 633 634 635 634 644 644 644 644 644 644 644	C 605 18 0.9 1871 9 C 606 18 0.9 1871 9 C 606 18 0.9 1871 9 C 608 18 0.9 1871 9 C 609 18 0.9 1871 9 C 610 18 0.9 1871 9 C 611 18 0.9 1871 9 C 612 18 0.9 1871 9 C 614 18 0.9 1871 9 C 615 18 0.9 1871 9 C 616 18 0.9 1871 9 C 617 18 0.9 1871 9 C 620 18 0.9 1871 9 C 621 18 0.9 1871 9 C 622 18 0.9 1871 9 C 623 18 0.9 1871 9
625 18 0.9 1871 9 ACP50128 626 18 0.9 1871 9 ACD9527 627 18 0.9 1871 9 ACD9527 628 18 0.9 1871 9 ACD9606 630 18 0.9 1871 9 ACD9606 631 18 0.9 1871 9 ACD9626 632 18 0.9 1871 9 ACC92482 633 18 0.9 1871 9 ACC92372 634 18 0.9 1871 9 ACC92372 635 18 0.9 1871 9 ACC92372 636 18 0.9 1871 9 ACC92372 637 18 0.9 1871 9 ACC9334 639 18 0.9 1871 9 ACC95344 639 18 0.9 1871 9 ACC95344 640 18 0.9 1871 9 ACC95346 644 18 0.9 1871 9 ACC95346 644 18 0.9 1871 9 ACC65728 645 18 0.9 1871 9 ACC65728 646 18 0.9 1871 9 ACC65728 647 18 0.9 1871 9 ACC65728 648 18 0.9 1871 9 ACC65728 650 18 0.9 1871 9 ACC65728 651 18 0.9 1871 9 ACC65728 652 18 0.9 1871 9 ACC65728 653 18 0.9 1871 9 ACC65728 654 18 0.9 1871 9 ACC65728 655 18 0.9 1871 9 ACC65728 656 18 0.9 1871 9 ACC65728 657 18 0.9 1871 9 ACC65728 668 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65728 668 18 0.9 1871 9 ACC65729 668 18 0.9 1871 9 ACC65729 668 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65728 668 18 0.9 1871 9 ACC65729 668 18 0.9 1871 9 ACC65729 669 18 0.9 1871 9 ACC65729 667 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65729 668 18 0.9 1871 9 ACC65728 667 18 0.9 1871 9 ACC65738 677 18 0.9 1871 9 ACC65738 677 18 0.9 1871 9 ACC65738	C 605 18 0.9 1871 9 ACF24250 C 606 18 0.9 1871 9 ACF63561 C 607 18 0.9 1871 9 ACF63561 C 608 18 0.9 1871 9 ACH07906 C 609 18 0.9 1871 9 ACF13712 C 610 18 0.9 1871 9 ACF23129 C 611 18 0.9 1871 9 ACF23329 C 613 18 0.9 1871 9 ACF23329 C 614 18 0.9 1871 9 ACF23329 C 615 18 0.9 1871 9 ACF23329 C 616 18 0.9 1871 9 ACF23198 C 617 18 0.9 1871 9 ACF27378 C 618 0.9 1871 9 ACF27378 C 619 18 0.9 1871 9 ACF27378 C 620 18 0.9 1871 9 ACF27378 C 621 18 0.9 1871 9 ACF2834 C 622 18 0.9 1871 9 ACF2831 C 623 18 0.9 1871 9 ACF2831 C 623 18 0.9 1871 9 ACF277143 C 624 18 0.9 1871 9 ACF77143 C 623 18 0.9 1871 9 ACF76836
625 18 0.9 1871 ACPS0128 ACPS0128 ACCS0128 Human 6227 18 0.9 1871 ACCS0128 ACCS0128 Human 6228 18 0.9 1871 ACCS0128 ACCS0128 Human 6229 18 0.9 1871 ACCS0128 ACCS0128 Human 6231 18 0.9 1871 ACCS0128 ACCS0128 Human 6232 18 0.9 1871 ACCS0128 ACCS0128 Human 6242 18 0.9 1871 ACCS0128 ACCS0128 Human 6242 18 0.9 1871 ACCS0128 ACCS0128 Human 6243 18 0.9 1871 ACCS0128 ACCS0128 Human 6244 18 0.9 1871 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 ACCS0128 Human 6250 18 0.9 1871 ACCS0128 ACCS0128 Human	C 605 18 0.9 1871 9 ACF24250 C 606 18 0.9 1871 9 ACF63561 C 607 18 0.9 1871 9 ACF63561 C 608 18 0.9 1871 9 ACF039435 C 608 18 0.9 1871 9 ACF13712 C 610 18 0.9 1871 9 ACF13712 C 611 18 0.9 1871 9 ACF23051 C 612 18 0.9 1871 9 ACF23029 C 613 18 0.9 1871 9 ACF23029 C 614 18 0.9 1871 9 ACF240019 C 615 18 0.9 1871 9 ACF23198 C 616 18 0.9 1871 9 ACF27378 C 617 18 0.9 1871 9 ACF27378 C 618 0.9 1871 9 ACF27378 C 619 18 0.9 1871 9 ACF27378 C 620 18 0.9 1871 9 ACF2884 C 621 18 0.9 1871 9 ACF2884 C 622 18 0.9 1871 9 ACF28851 C 623 18 0.9 1871 9 ACF77143 C 623 18 0.9 1871 9 ACF77143 C 624 18 0.9 1871 9 ACF76836

C 689 18 0.9 1871 3 ACP34892 C 681 18 0.9 1871 3 ACP34892 C 683 18 0.9 1871 3 ACP30449 C 683 18 0.9 1871 3 ACP30449 C 683 18 0.9 1871 3 ACP30449 C 685 18 0.9 1871 3 ACP30494 C 686 18 0.9 1871 3 ACP30494 C 687 18 0.9 1871 3 ACP3022 C 689 18 0.9 1871 3 ACP3022 C 689 18 0.9 1871 3 ACP30322 C 699 18 0.9 1871 3 ACP30322 C 703 18 0.9 1871 3 ACP30322 C 704 18 0.9 1871 3 ACP30322 C 705 18 0.9 1871 3 ACP30322 C 706 18 0.9 1871 3 ACP30322 C 707 18 0.9 1871 3 ACP30322 C 708 18 0.9 1871 3 ACP30322 C 709 18 0.9 1871 3 ACP30323 C 714 18 0.9 1871 3 ACP30323 C 715 18 0.9 1871 3 ACP30323 C 716 18 0.9 1871 3 ACP30323 C 717 18 0.9 1871 3 ACP30323 C 718 18 0.9 1871 3 ACP30323 C 719 18 0.9 1871 3 ACP30323 C 710 18 0.9 1871 3 ACP30323 C 710 18 0.9 1871 3 ACP30323 C 711 18 0.9 1871 3 ACP30323 C 712 18 0.9 1871 3 ACP30323 C 713 18 0.9 1871 3 ACP30323 C 714 18 0.9 1871 3 ACP30323 C 715 18 0.9 1871 3 ACP30323 C 716 18 0.9 1871 3 ACP30323 C 717 18 0.9 1871 3 ACP30323 C 718 18 0.9 1871 3 ACP30323 C 719 18 0.9 1871	678 18 0.9 15
Acf44892 Human sec Acd9137 Human sec Acd9137 Human sec Acd9137 Human sec Acf30448 Human sec Acf30448 Human sec Acf30448 Human sec Acf60201 Human sec Acf60201 Human sec Acf60201 Human sec Acf60202 Human sec Acf60202 Human sec Acf608022 Human sec Acf608022 Human sec Acf608022 Human sec Acf608022 Human sec Acf40831 Human sec Acf47979 Human sec Acf47979 Human sec Acf47979 Human sec Acf47979 Human sec Acf46137 Human sec Acf46137 Human sec Acf61384 Human sec Acf61429 Human sec Acf61736 Human sec Acf61429 Human sec Acf61736 Human sec Acf617408 Human sec Acf617408 Human sec Acf617672 Human sec Acf617679 Human sec Acf6	
C 752 C 752 C 753 C 754 C 755 C 755 C 755 C 756 C 756 C 756 C 756 C 756 C 757 C 756 C 756 C 757 C 756 C 757	
Acf40326 Human sec Acf40386 Human sec Acf40386 Human sec Acf405171 Human sec Acf39517 Human sec Acf39517 Human sec Acf29517 Human sec Acf29517 Human sec Acf29517 Human sec Acf40611 Human sec Acf40611 CDNA enco Ach06316 CDNA enco Ach06316 CDNA enco Ach06316 CDNA enco Ach06316 CDNA enco Acf409794 Human sec Acf410328 Human sec Acf4101074 Human sec Acf410174 Human sec Acf41014 Human sec Acf9081 Human sec Acf40811 Human sec Acf00914 Human sec Acf1109 Human sec Acf00914 Human sec Acf00914 Human sec Acf1109 Human sec Acf1100 Human sec Acf1100 Human sec Acf1100	Page 6

999999988							0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
							110000000000000000000000000000000000000
1871 1871 1871 1871 1871 1871 1871 1871	8 8 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	87 87 87 87	87	1871 1871 1871 1871 1871 1871 1871 1871	88888887	1871 1871 1871 1877 1877 1877 1877 1877	1871 1871 1871 1871 1871 1871 1871 1871
							0000000000000000
ACF56268 ADB68343 ADB68150 ADB68150 ACF55654 ACF55640 ACF55640 ACF567040 ADB90967 ADC18086	CF60815 CH05702 DDA82736 DDB85664 CCF55961 ACF55347	CF45523 CF38542 CD89603 CD85305 CD85919 CD85915	(CF9154 (CF07101 (CF77757 (CD46155 (CF47058 (CF47058 (CF4426	CF61122 CF44278 CCF44278 CCF3520 CCF39907 CD21012 CD21012 CD20705 CD20705	CF78985 CCF11706 CCF11706 CCF1163 CCF33586 CCF37621 CCF37621 CCF37621 CCF3606 CCD88682	CEP37928 CCF30141 CCF37928 CCF62043 CCF162043 CCF1666 CCD16866 CCD16866 CCD9163 CCF046863 CCF14686	ACC90421 ACF10785 ACC93600 ACC93619 ACD24894 ACF01979 ACF22111 ACF22715 ACF22715 ACF22715 ACF3279 ACF3279 ACF34733 ACF34733 ACF34733 ACD47383
געעעעעעעע	P A A A A A A A	A A A A A A A A A A A A A A A A A A A	A A A A A A A A A A A A A A A A A A A	7 A A A A A A A A A A A A A A A A A A A	A A A A A A A A A A A A A A A A A A A	2	A A A A A A A A A A A A A A A A A A A
cf5626 db6834 db6835 db6855 cf5565 cf5504 dc1808	160815 h05702 a82736 b85664 f55961	£45523 £38542 d89603 d85305 d85919	£41554 £07101 £77757 d46155 £47058 £4426 £45830	f61122 f44278 h08520 c93907 d21012 f06794 d20705 d22854	£75301	£37928 £30141 £301454 £62043 £10976 £10141 £10165 £00557 £10653 £14633	Acc90421 Acf10785 Acf20785 Acc96219 Acc962199 Acd24894 Acf22101 Acf22715 Acf22715 Acf233279 Acf54733 Acf33279 Acf54733 Acf4478893 Acd4788593
Huma Huma Huma Huma Huma Huma Huma Huma	Humar cDNA Humar Novel Humar	Humar Humar Humar Humar Humar Humar	Human Human Human Human Human Human Human	Humai Humai Humai Humai Humai Humai	Human Human Human Human Human Human Human Human Human	Humai	Human
n sec n pro n pro n pro n pro n sec n sec n sec n pro	' m ~ m ~ m	8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8				
	<u></u>						
		000000	0 0 0 0 0 0		0000000000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0 0 0 0 0 0 0 0 0 0 0 0
10 10 10 10 10 10 10 10 10 10					10 10 10 10 10 10 10 10 10 10		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
960 962 1 963 1 964 1 965 1 966 1	2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	948 949 950 951 952 1	941 942 943 944 1 946 1	933 935 936 937 938 938 938 938 938 938 938 938	923 924 925 926 1 927 928 1 929 930 1 931	911 912 913 914 915 916 1 916 1 917 1 918 1 919 1 91 1 9 1 1 9 1 1 9 1 1 9 1 1 9 1	10 10 10 10 10 10 10 10 10 10 10 10 10
960 962 962 963 118 964 964 118 965 118 966 118 967 118 969 118 0	954 18 0. 955 18 0. 956 18 0. 957 18 0. 959 18 0.	948 18 0. 949 18 0. 950 18 0. 951 18 0. 952 18 0. 953 18 0.	941 18 0. 942 18 0. 943 18 0. 944 18 0. 945 18 0. 945 18 0.	933 18 0. 934 18 0. 935 18 0. 937 18 0. 937 18 0. 937 18 0.	923 18 0 0 925 18 0 0 925 18 0 0 926 18 0 0 927 18 0 0 927 18 0 0 928 18 0 0 932 18 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 932 18 0 0 0 0 932 18 0 0 0 0 932 18 0 0 0 0 932 18 0 0 0 0 932 18 0 0 0 0 0 932 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	911 18 0. 912 18 0. 913 18 0. 914 18 0. 915 18 0. 916 18 0. 917 18 0. 917 18 0. 918 18 0. 919 18 0.	899 899 900 900 900 900 900 900 900 900
962 18 0.9 963 18 0.9 963 18 0.9 964 18 0.9 965 18 0.9 966 18 0.9 966 18 0.9 968 18 0.9	954 18 0.9 955 18 0.9 957 18 0.9 958 18 0.9 958 18 0.9	948 18 0.9 949 18 0.9 950 18 0.9 951 18 0.9 952 18 0.9 953 18 0.9	941 18 0.9 942 18 0.9 943 18 0.9 944 18 0.9 945 18 0.9 946 18 0.9 947 18 0.9	933 18 0.9 934 18 0.9 935 18 0.9 937 18 0.9 937 18 0.9 938 938 18 0.9 938 0.9 939 939 939 939 939 939 939 9	923 924 118 9.9 925 118 9.9 926 118 9.9 927 118 9.9 928 118 9.9 929 118 9.9 929 118 9.9 929 118 9.9 920 920 920 920 920 920 920 92	911 18 0.9 912 18 0.9 913 18 0.9 914 18 0.9 915 18 0.9 916 18 0.9 917 18 0.9 918 18 0.9 919 18 0.9 919 18 0.9 920 18 0.9	899 118 0. 899 118 0. 900 118 0. 901 18 0. 902 118 0. 903 118 0. 904 118 0. 905 118 0. 906 118 0. 907 18 0. 908 18 0. 908 18 0.
961 18 0.9 1871 10 962 18 0.9 1871 10 963 18 0.9 1871 10 964 18 0.9 1871 10 965 18 0.9 1871 10 965 18 0.9 1871 10 966 18 0.9 1871 10 967 18 0.9 1871 10 968 18 0.9 1871 10 969 18 0.9 1871 10	954 18 0.9 1871 10 955 18 0.9 1871 10 956 18 0.9 1871 10 957 18 0.9 1871 10 958 18 0.9 1871 10 959 18 0.9 1871 10	948 18 0.9 1871 10 949 18 0.9 1871 10 950 18 0.9 1871 10 951 18 0.9 1871 10 952 18 0.9 1871 10 953 18 0.9 1871 10	941 18 0.9 1871 10 942 18 0.9 1871 10 943 18 0.9 1871 10 944 18 0.9 1871 10 945 18 0.9 1871 10 946 18 0.9 1871 10 947 18 0.9 1871 10	933 18 0.9 1871 10 934 18 0.9 1871 10 935 18 0.9 1871 10 936 18 0.9 1871 10 937 18 0.9 1871 10 937 18 0.9 1871 10 939 18 0.9 1871 10 939 18 0.9 1871 10 940 18 0.9 1871 10	923 18 0.9 1871 10 924 18 0.9 1871 10 925 18 0.9 1871 10 926 18 0.9 1871 10 927 18 0.9 1871 10 928 18 0.9 1871 10 929 18 0.9 1871 10 929 18 0.9 1871 10 930 18 0.9 1871 10 931 18 0.9 1871 10 931 0.9 1871 10	911 18 0.9 1871 10 912 18 0.9 1871 10 913 18 0.9 1871 10 914 18 0.9 1871 10 915 18 0.9 1871 10 916 18 0.9 1871 10 917 18 0.9 1871 10 918 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 920 18 0.9 1871 10 921 18 0.9 1871 10 921 18 0.9 1871 10	897 18 0.9 1871 10 898 18 0.9 1871 10 899 18 0.9 1871 10 900 18 0.9 1871 10 901 18 0.9 1871 10 902 18 0.9 1871 10 903 18 0.9 1871 10 904 18 0.9 1871 10 905 18 0.9 1871 10 906 18 0.9 1871 10 907 18 0.9 1871 10 908 18 0.9 1871 10 909 18 0.9 1871 10 909 18 0.9 1871 10 910 18 0.9 1871 10
961 18 0.9 1871 10 962 18 0.9 1871 10 963 18 0.9 1871 10 964 18 0.9 1871 10 965 18 0.9 1871 10 965 18 0.9 1871 10 966 18 0.9 1871 10 967 18 0.9 1871 10 968 18 0.9 1871 10 969 18 0.9 1871 10	954 18 0.9 1871 10 955 18 0.9 1871 10 956 18 0.9 1871 10 957 18 0.9 1871 10 958 18 0.9 1871 10 959 18 0.9 1871 10	948 18 0.9 1871 10 949 18 0.9 1871 10 950 18 0.9 1871 10 951 18 0.9 1871 10 952 18 0.9 1871 10 953 18 0.9 1871 10	941 18 0.9 1871 10 942 18 0.9 1871 10 943 18 0.9 1871 10 944 18 0.9 1871 10 945 18 0.9 1871 10 946 18 0.9 1871 10 947 18 0.9 1871 10	933 18 0.9 1871 10 934 18 0.9 1871 10 935 18 0.9 1871 10 936 18 0.9 1871 10 937 18 0.9 1871 10 937 18 0.9 1871 10 939 18 0.9 1871 10 939 18 0.9 1871 10 940 18 0.9 1871 10	923 18 0.9 1871 10 924 18 0.9 1871 10 925 18 0.9 1871 10 926 18 0.9 1871 10 927 18 0.9 1871 10 928 18 0.9 1871 10 929 18 0.9 1871 10 929 18 0.9 1871 10 930 18 0.9 1871 10 931 18 0.9 1871 10 931 0.9 1871 10	911 18 0.9 1871 10 912 18 0.9 1871 10 913 18 0.9 1871 10 914 18 0.9 1871 10 915 18 0.9 1871 10 916 18 0.9 1871 10 917 18 0.9 1871 10 918 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 920 18 0.9 1871 10 921 18 0.9 1871 10 921 18 0.9 1871 10	897 18 0.9 1871 898 18 0.9 1871 899 18 0.9 1871 900 18 0.9 1871 901 18 0.9 1871 902 18 0.9 1871 902 18 0.9 1871 903 18 0.9 1871 904 18 0.9 1871 905 18 0.9 1871 906 18 0.9 1871 907 18 0.9 1871 908 18 0.9 1871 908 18 0.9 1871 909 18 0.9 1871 900 18 0.9 1871
961 18 0.9 1871 10 962 18 0.9 1871 10 963 18 0.9 1871 10 964 18 0.9 1871 10 965 18 0.9 1871 10 965 18 0.9 1871 10 966 18 0.9 1871 10 967 18 0.9 1871 10 968 18 0.9 1871 10 969 18 0.9 1871 10	954 18 0.9 1871 10 955 18 0.9 1871 10 956 18 0.9 1871 10 957 18 0.9 1871 10 958 18 0.9 1871 10 959 18 0.9 1871 10	948 18 0.9 1871 10 949 18 0.9 1871 10 950 18 0.9 1871 10 951 18 0.9 1871 10 952 18 0.9 1871 10 953 18 0.9 1871 10	941 18 0.9 1871 10 942 18 0.9 1871 10 943 18 0.9 1871 10 944 18 0.9 1871 10 945 18 0.9 1871 10 946 18 0.9 1871 10 947 18 0.9 1871 10	933 18 0.9 1871 10 934 18 0.9 1871 10 935 18 0.9 1871 10 936 18 0.9 1871 10 937 18 0.9 1871 10 937 18 0.9 1871 10 939 18 0.9 1871 10 939 18 0.9 1871 10 940 18 0.9 1871 10	923 18 0.9 1871 10 924 18 0.9 1871 10 925 18 0.9 1871 10 926 18 0.9 1871 10 927 18 0.9 1871 10 928 18 0.9 1871 10 929 18 0.9 1871 10 929 18 0.9 1871 10 930 18 0.9 1871 10 931 18 0.9 1871 10 931 0.9 1871 10	911 18 0.9 1871 10 912 18 0.9 1871 10 913 18 0.9 1871 10 914 18 0.9 1871 10 915 18 0.9 1871 10 916 18 0.9 1871 10 917 18 0.9 1871 10 918 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 919 18 0.9 1871 10 920 18 0.9 1871 10 921 18 0.9 1871 10 921 18 0.9 1871 10	897 18 0.9 1871 10 898 18 0.9 1871 10 899 18 0.9 1871 10 900 18 0.9 1871 10 901 18 0.9 1871 10 902 18 0.9 1871 10 903 18 0.9 1871 10 904 18 0.9 1871 10 905 18 0.9 1871 10 906 18 0.9 1871 10 907 18 0.9 1871 10 908 18 0.9 1871 10 909 18 0.9 1871 10 909 18 0.9 1871 10 910 18 0.9 1871 10
961 18 0.9 1871 10 ACA71350 962 18 0.9 1871 10 ACC87658 963 18 0.9 1871 10 ACC87658 964 18 0.9 1871 10 ACC877044 965 18 0.9 1871 10 ACC87042 965 18 0.9 1871 10 ACA69548 967 18 0.9 1871 10 ACA90393 967 18 0.9 1871 10 ACC89500 968 18 0.9 1871 10 ACC89500 969 18 0.9 1871 10 ACC89500 960 18 0.9 1871 10 ACC89500	954 18 0.9 1871 10 ADII1138 Ad 955 18 0.9 1871 10 ADII1648 Ad 956 18 0.9 1871 10 ADH98293 Adl 957 18 0.9 1871 10 ADH98633 Adl 958 18 0.9 1871 10 ADH98123 Adl 959 18 0.9 1871 10 ADH98123 Adl 959 18 0.9 1871 10 ABH98123 Adl	948 18 0.9 1871 10 ADH97783 Adi 949 18 0.9 1871 10 ADH99410 Adi 950 18 0.9 1871 10 ADH99410 Adi 951 18 0.9 1871 10 ADI103631 Adi 951 18 0.9 1871 10 ADH90622 Adi 953 18 0.9 1871 10 ADH9063 Adi	941 18 0.9 1871 10 ADH53568 Add 942 18 0.9 1871 10 ADH53738 Add 943 18 0.9 1871 10 ADH52074 Add 944 18 0.9 1871 10 ADH49929 Add 945 18 0.9 1871 10 ADH52649 Add 946 18 0.9 1871 10 ADH52649 Add 947 18 0.9 1871 10 ADI25609 Add	933 18 0.9 1871 10 ADH24293 Add 934 18 0.9 1871 10 ADG83708 Add 935 18 0.9 1871 10 ADG83708 Add 936 18 0.9 1871 10 ADH29516 Add 937 18 0.9 1871 10 ADH27632 Add 937 18 0.9 1871 10 ADH37829 Add 938 18 0.9 1871 10 ADH37829 Add 939 18 0.9 1871 10 ADH37826 Add 940 18 0.9 1871 10 ADH37826 Add 940 18 0.9 1871 10 ADH57826 Add	923 18 0.9 1871 10 ADH34129 924 18 0.9 1871 10 ADH3982 Add 925 18 0.9 1871 10 ADH29982 Add 926 18 0.9 1871 10 ADH29983 Add 927 18 0.9 1871 10 ADH29983 Add 928 18 0.9 1871 10 ADH2963 Add 929 18 0.9 1871 10 ADH24633 Add 929 18 0.9 1871 10 ADH24633 Add 930 18 0.9 1871 10 ADH37489 Add 931 18 0.9 1871 10 ADH37489 Add 931 18 0.9 1871 10 ADH37659 Add 931 18 0.9 1871 10 ADH37659 Add	911 18 0.9 1871 10 ADE50030 Ad 912 18 0.9 1871 10 ADF50030 Ad 913 18 0.9 1871 10 ADF30013 Ad 914 18 0.9 1871 10 ADF5596 Ad 915 18 0.9 1871 10 ADF5596 Ad 916 18 0.9 1871 10 ADG01096 Ad 917 18 0.9 1871 10 ADG02769 Ad 917 18 0.9 1871 10 ADG02769 Ad 918 0.9 1871 10 ADF95691 Ad 919 18 0.9 1871 10 ADF95691 Ad 919 18 0.9 1871 10 ADF95691 Ad 910 18 0.9 1871 10 ADF95691 Ad 920 18 0.9 1871 10 ADF95691 Ad 921 18 0.9 1871 10 ADF95691 Ad 922 18 0.9 1871 10 ADF95691 Ad 933 1871 10 ADF95691 Ad 944 Ad	897 18 0.9 1871 10 ADC17226 Ad 898 18 0.9 1871 10 ADC14924 Ad 899 18 0.9 1871 10 ADC52419 Ad 900 18 0.9 1871 10 ADD055774 Ad 901 18 0.9 1871 10 ADD057732 Ad 902 18 0.9 1871 10 ADD39809 Ad 903 18 0.9 1871 10 ADD36095 Ad 904 18 0.9 1871 10 ADD36095 Ad 905 18 0.9 1871 10 ADD38376 Ad 906 18 0.9 1871 10 ADD38376 Ad 907 18 0.9 1871 10 ADD38376 Ad 908 18 0.9 1871 10 ADD38855 Ad 909 18 0.9 1871 10 ADD30885 Ad 900 18 0.9 1871 10 ADD50507 Ad
961 18 0.9 1871 10 ACA71350 962 18 0.9 1871 10 ACC87658 963 18 0.9 1871 10 ACC87658 964 18 0.9 1871 10 ACC877044 965 18 0.9 1871 10 ACC87042 965 18 0.9 1871 10 ACA69548 967 18 0.9 1871 10 ACA90393 967 18 0.9 1871 10 ACC89500 968 18 0.9 1871 10 ACC89500 969 18 0.9 1871 10 ACC89500 960 18 0.9 1871 10 ACC89500	954 18 0.9 1871 10 ADI11138 Adi11138 955 18 0.9 1871 10 ADI11648 Adi11648 956 18 0.9 1871 10 ADH98293 Adh98293 957 18 0.9 1871 10 ADH98633 Adh98633 958 18 0.9 1871 10 ADH98123 Adh98123 959 18 0.9 1871 10 ADH98123 Adh98123 959 18 0.9 1871 10 ABX78678 Abx78678	948 18 0.9 1871 10 ADH97783 Adh97783 949 18 0.9 1871 10 ADH99410 Adh99410 950 18 0.9 1871 10 ADH99410 Adi199410 951 18 0.9 1871 10 ADI11988 Adi193631 952 18 0.9 1871 10 ADH90062 953 18 0.9 1871 10 ADH90062 Adh90463	941 18 0.9 1871 10 ADH53568 Add 942 18 0.9 1871 10 ADH53738 Add 943 18 0.9 1871 10 ADH52074 Add 944 18 0.9 1871 10 ADH49929 Add 945 18 0.9 1871 10 ADH52649 Add 946 18 0.9 1871 10 ADH52649 Add 947 18 0.9 1871 10 ADI25609 Add	933 18 0.9 1871 10 ADH24293 934 18 0.9 1871 10 ADH24293 935 18 0.9 1871 10 ADG83788 936 18 0.9 1871 10 ADG83708 936 18 0.9 1871 10 ADH29516 937 18 0.9 1871 10 ADH29516 938 0.9 1871 10 ADH27632 938 18 0.9 1871 10 ADH37829 939 18 0.9 1871 10 ADH37820 939 18 0.9 1871 10 ADH37820 930 18 0.9 1871 10 ADH38006 940 18 0.9 1871 10 ADH38006 940 18 0.9 1871 10 ADH38006 940 18 0.9 1871 10 ADH37426	923 18 0.9 1871 10 ADH34149 924 18 0.9 1871 10 ADH29982 925 18 0.9 1871 10 ADH29982 926 18 0.9 1871 10 ADH29933 927 18 0.9 1871 10 ADH9126 927 18 0.9 1871 10 ADG85357 928 18 0.9 1871 10 ADG85357 928 18 0.9 1871 10 ADG85357 929 18 0.9 1871 10 ADH37489 930 18 0.9 1871 10 ADH37489 931 18 0.9 1871 10 ADH37489 931 18 0.9 1871 10 ADH37489 931 18 0.9 1871 10 ADH37659 932 18 0.9 1871 10 ADH37659 933 18 0.9 1871 10 ADH37659 934 935 1871 10 ADH37659 936 937 1871 10 ADH37659 937 18 0.9 1871 10 ADH37659 938 939 939 939 939 939 939 939 939 939	911 18 0.9 1871 10 ADE50030 912 18 0.9 1871 11 ADE51030 913 18 0.9 1871 11 ADE51038 914 18 0.9 1871 11 ADE51031 915 18 0.9 1871 10 ADE51036 916 18 0.9 1871 10 ADG01096 917 18 0.9 1871 10 ADG01096 918 0.9 1871 10 ADG01096 917 18 0.9 1871 10 ADG02769 918 0.9 1871 10 ADG02769 919 18 0.9 1871 10 ADG02769 920 18 0.9 1871 10 ADG02769 921 18 0.9 1871 10 ADG02763 922 18 0.9 1871 10 ADG02763 923 18 0.9 1871 10 ADG02763 924 Add027476 925 18 0.9 1871 10 ADG02763 926 Add027476 927 18 0.9 1871 10 ADG027466	897 18 0.9 1871 10 ADC17226 Ad 898 18 0.9 1871 10 ADC14924 Ad 899 18 0.9 1871 10 ADC52419 Ad 900 18 0.9 1871 10 ADD55774 Ad 901 18 0.9 1871 10 ADD39809 Ad 902 18 0.9 1871 10 ADD39809 Ad 903 18 0.9 1871 10 ADD36095 Ad 904 18 0.9 1871 10 ADD36095 Ad 905 18 0.9 1871 10 ADD38376 Ad 906 18 0.9 1871 10 ADD38376 Ad 907 18 0.9 1871 10 ADD38376 Ad 908 18 0.9 1871 10 ADD39855 Ad 909 18 0.9 1871 10 ADD39855 Ad 909 18 0.9 1871 10 ADD50507 Ad 900 18 0.9 1871 10 ADD50507 Ad 900 18 0.9 1871 10 ADD50507 Ad 900 18 0.9 1871 10 ADD50507 Ad 910 18 0.9 1871 10 ADD50507 Ad

OY         421 CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC         420	se) primer"	'a	
	nse) primer"	/bound_moiety= "ht-3 (anti-se 17771796 /*tag= g	FT primer_bind
Db 301 GTGCCCGATGGTGTCTGCTCCAACCTTCCCTTATGCCTCCGGTTTGAGTCTTTCTGC 360	=	ъ . н	FT primer_bind FT
	` <b>≡</b>	/bound_moiety= "GSP2-T1 primer 910. 930 /*tag= 6	FT primer_bind
241	primer"	/bound_molety= "ht-5 (sense) 833854 /*tag= d	FT primer_bind
	-	bind /*tag= b //bound_moiety= "Tes-N1 primer" complement(749. 768)	primer
Db 121 GCCCAGGATTCGACTCAGGCCCCACTCCAGGCAGCCCTCTCTCT	protein"	a ct= "Human OY-TES-1 296	mer.
61		Location/Qualifiers	Key
61	ctie; iiDrosarcoma cancer;	iated antigen; se	Homo sa
GATCTTCTCCGGCCATGAGGA		ciated antigen ON cytostatic; gene	Human;
No. 0; Length 1895; No. 0; Length 1895; No. 0; Indels 0; Care		2001 (first entry)	04-SEI
fatch 100.0%: Score leas: 15 0 0;		3,	AC AAD08658 XX
		8 standard; cDNA; 1895 BP.	Ą
CC thrapy. The present sequence is a CDNA encoding human cancer associated CC antigen OY-TES-1			SUI.
		ALIGNMENTS	
	Adi01693 Novel hum Adi01863 Novel hum	0.9 1871 10	000
	ovel	0.9 1871 10 0.9 1871 10 0.9 1871 10	999
	ovel	0.9 1871 10 0.9 1871 10	996
	uman ovel	0.9 1871 10 0.9 1871 10	44.5
PT Isolated polypeptide, useful in treating disorders such as cancer, is encoded by a nucleic acid (NA) Group 3 or 4 molecule.	Adi11478 Human PRO Adi02380 Novel hum	0.9 1871 10 0.9 1871 10 0.9 1871 10	991
DR WEI; 2001-397941/42. DR P-PSDB; AAE04382. XX	love1	0.9 1871 10 0.9 1871 10 0.9 1871 10	989
PI Ono T, Nakayama E;	fuman	0.9 1871 10 0.9 1871 10	986
PA (LUDW-) LUDWIG INST CANCER RES.	love1	0.9 1871 10 0.9 1871 10	984
PR 01-DEC-1999; 99US-0168353P. PR 26-APR-2000; 2000US-00559013. XX	Adi 04856 Novel hum Adh78310 Human PRO	0.9 1871 10 0.9 1871 10 0.9 1871 10	981 982
01	Novel Novel	0.9 1871 10 0.9 1871 10	979 980
0	Novel Novel	0.9 1871 10 0.9 1871 10	976 977
WO200140271-A2.	Acf15554 Human sec Aca72921 Human pro	0.9 1871 10	974 975
FT polyA_signal 18691874 FT /*tag= h		18 0.9 1871 10 ACD08913 18 0.9 1871 10 ACD08913 18 0.9 1871 10 ACC96833	c 971 c 972 c 973
,		0.9 1871 17	970

```
1381
                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                            1141
    1501
                                                           1441
                                                                                        1441
                                                                                                                                                                              1321
                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
 CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                              GGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTGGAAGTACATGGAGGAGAGGAGCATTCCTTGGTTTTCGGGAAGTCCGTTCGTCACACACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                    CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                     CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                               TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                        GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                      GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                    TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                                                                                                              GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTTCGGGAAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACTCCTACTGGAGAAACCAAAAACCCTTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTCTCAGCTGCAGACAGACTCAGAGCCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTCTCAGCTGCAGACAGAGCTCAGAGCTCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACAGGAAGAGGAAAGCAAGGAAGAAGGACAGGGACTAAGGAGGGACGGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAAACAGGAAGAGAGAGAGAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCACCCACCACGATGACCTCCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                          1320
                                                                                                                                                                                                                                                                     1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1080
1560
                            1560
                                                          1500
                                                                                      1500
                                                                                                                    1440
                                                                                                                                                1440
                                                                                                                                                                              1380
                                                                                                                                                                                                            1380
                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                1260
                                                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                                                           1200
                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
```

음 성 음 성

밁 5 닭 S 밁 8 뫄 δ 밁 Ś 밁 Ś 밁 δ 밁

유

S

음 중 음

음 중 В ð

Query Match

Sequence

1886 BP; 440 A; 565

Ç Score

481 <u>،</u> 1886;

400 T;

0 Other;

DB

8 0 ű

Length 1886;

The invention comprises the amino acid and coding sequences of human cancer-testis (CT) antigens that bind an HLA molecule. The CT antigens the invention are useful for diagnosing, monitoring or treating cancer (e.g. breast cancer, colon cancer, cervical cancer or gastric cancer). The present DNA sequence encodes a human cancer-testis (CT) antigen

œ,

Example 2;

Page 151-154; 165pp; English

음 성

흄 · 정

밁 Ś 멍 Ş

```
RESULT 2
ABT11479
ID ABT1
XX
ABT11747
AC ABT1
XX
ABT117
AC ABT1
XX
AC ABT1
XX
AC Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                    New cancer-testis (CT) antigens, nucleic acids and encoded polypeptides, useful for diagnosing, monitoring or treating disorder or condition associated with the expression of human CT antigens, e.g. breast cancer or cervical cancer.
                                                                                                                                                                                                                                                                                                                                                           P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                Nakayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-APR-2001; 2001US-0285343P.
14-FEB-2002; 2002US-0356937P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-APR-2002; 2002WO-US012497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cancer-testis antigen coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT14679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LUDW-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200286071-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ıman; gene;
Cantigen; b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens.
                                                                                                                                                                                                                                                                                                                                                           2003-075624/07.
DB; AAO16118.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LUDWIG INST
                                                                                                                                                                                                                                                                                                                                                                                                                             M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACTTTACATAAAATGTTGATCTTCAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ds; gene therapy; vaccine;
breast cancer; colon cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                Ono
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                      H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA; 1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                510
                                                                                                                                                                                                                                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             colon cancer; cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer-testis antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gastric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
```

1 GTTAGAGGCGGC 1 GCCGCTGGCTTC 1 GTTAGAGGCGGC 1 GCCGCTGGCTTC 1 GCCGCTGGCTTC 1 GCCGCTGGCTTC 1 GCCCAGGATTCG 1 GCCCAGGATTCG 21 GCCCAGGATTCG 21 GCCCAGGATTCG 21 GCCCAGGATTCG 21 GCCCAGGATTCG 21 GCCCAGGATTCG 21 GCCCACGGCTGCC 41 ACCCACGGCTGCC C 41 ACCCACGGCTGCCAC 41 ACCCACGGCTGCCAC 41 ACCCACGATCCTAC 41 ACCCACGATCCTCACT 41 ACCCACGATCCTCACT 41 ACCCACCACGATCCTA 41 ACCCACGACGCCAC 41 ACCCACGACGCCACACA 41 ACCCACGAGGCCACACA 41 ACCCAGGAGGCCACACACACACACACACACACACACACA	
DB 1021 TROCTOGROCHOROMORIANICOCTONICATIANCACCCONOCOCCAMA 1180  DO 1081 COCTOSAMORIA CONTRICTICOCTONICATICOCTONICATIANCACCONOCOCCAMA 1180  DO 1141 COCCOCTONICATICOCTOCTONICATICOCTOCTONICATICOCTONICA	Page 10

8 Ş b ş B Ş В Ś 밁 ş g Ś 뭐 δ Дb Ś 밁 Ś 멍 Ś 밁 Ş D<sub>D</sub> Ś 뮍 Ś 밁 Ş 밁 Ş 밁

```
유
                                         밁
                                                                 δ
                                                                                        닭
                                                                                                                ঠ
                                                                                                                                             Query Match
Best Local S
Matches 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bandmar.
Corley NC, Yu
                                                                                                                                                                                                                             The present sequence is a cDNA identified in Incyte clone 139301 derive from THYRNOT03 cDNA library. It encodes human protease and associated protein-10 (ppRG-10), which is expressed in reproductive, endocrine, haematopoietic and immune tissues. Anti-ppRG antibodies can be used as therapeutic antagonists, reagents for diagnosis and monitoring diseases and for isolating ppRG. ppRG nucleotide sequence can be used as probe or primer for diagnosis and monitoring of ppRG-related diseases and gene mapping. PpRG can be used in the treatment of cell proliferative disorders like cancer, arteriosclerosis, atherosclerosis, bursitis, cirrhosis and hepatitis, and immune disorders like AIDS, Addison's disease, adult respiratory distress syndrome, allergies, ankylosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-AUG-1998;
11-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ankylosing spondylitis; amyloidosis; cytostatic; antiarteriosclerotic; hepatototropic; antiinflammatory; virucide; antipsoriatic; anti-HIV; antiallergic; immunosuppressive; antidiabetic; antianaemic; neuroprotective; human; ss.
                                                                                                                                                                                             Sequence 1912 BP;
                                                                                                                                                                                                                     spondylitis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200009709-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                               Local Similarity
nes 1892; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                        numan proteases, useful for diagnosis, treatment and proliferative disorders such as atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000-224346/19.
                       121
                                                                                                                                                                                                                                                                                                                                                                                   9; Page 106; 114pp; English.
                                                77
                                                                      61
                                                                                                17
            GCCGCTGGCTTCCCTTCCCTCACTCCTGAAGGTGCTGCTTCCTGCCTCTGGCACCTGCCGCA
                                                                                               GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                 GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCCGGCCATGAGGAAGCCA
                                               GCCGCTGGCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hillman
Yue H,
                                                                                                                                             91.9%;
llarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= b
140. 1632
/*tag= c
/product= "Mature PPRG-10"
1190. 1134
/*tag= d
/*tag= d
/bound_moiety= "Probe or Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0096114P.
99US-0119768P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US017818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ħ,
                                                                                                                                                                                                                       amyloidosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product= 65. .139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers 65. .1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag=
                                                                                                                                                                                             455 A; 567 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JL,
Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baughn MR,
YT, Reddy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Human PPRG-10"
                                                                                                                                            Score 1742; D
Pred. No. 0;
0; Mismatches
                                                                                                                                               0
                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Azimzai Y, (
R, Patterson
                                                                                                                                                                                             G; 403
                                                                                                                                                                       밁
                                                                                                                                                                                             7,
                                                                                                                                                                    <u>ن</u>
                                                                                                                                                                                             0
                                                                                                                                             υ
•
                                                                                                                                                                                             u;
                                                                                                                                                                    Length 1912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guegler KJ;
n C, Au-Young
                                                                                                                                               Indels
                                                                                                                                                                                              0
                                                                                                                                                                                              Other;
                                                                                                                                                                                                                                                                                                                                                                                                                     prevention
                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                           derived
                                                                                                                                                                                                                                                                                                                                                                                                                        얁
                                                                                                                                                                                                                                                                                                ဝူ
                       180
                                               136
                                                                                                                      60
196
                                                                      120
                                                                                              76
                                                                                                                                             0
                                                         밁
                                                                             Ś
                                                                                                                           Ś
                                                                                                                                                         밁
                                                                                                                                                                            5
                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
           밁
                            र्
                                                                                                        밁
                                                                                                                                                                                                     몽
                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                          1097
                                                                                                                                                         1037
                                                                                                                                1081
                                                                                                                                                                                   1021
                                    1201
                                                                                                                                                                                                           977
                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                           917
                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                          857
                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                          797
                                                                                                                                                                                                                                                                                                                                                                                                          737
                                                                                                                                                                                                                                                                                                                                                                                                                                                           677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                        AACTCCTACTGGAGAAACCCAAAAACCCTTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGGCC
                                                                                                                                                                       TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAG
                                                                                                                                                                                                                                                                         CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                                            GTGTCTCAGCTGCAGACACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                          TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCCCGATGGTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCCACGGCTGCCGGAATCCCCACACTCGTCCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
            TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTT
                            TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTT
                                                                                  GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                          GCCTGGAAGTACATGGAGGAGGAGATCCTTGG
                                                                                                                                GCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                         TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                                                                                          AACTCCTACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAGCTGCCCCACACAGAGGCC
                                                                                                                                                                                                                                                            CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                                                                           GTGTCTCAGCTGCAGACAGACTCAGAGCCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCTGGGAGGCCAGGAGCAAGCGAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCTGGGAGGCCAGGAGCAAGCGCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGCCCGATGGTGTGTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                           TCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                  1200
            1276
                                                            1216
                                                                                                          1156
                                                                                                                                  1140
                                                                                                                                                           1096
                                                                                                                                                                                   1080
                                                                                                                                                                                                           1036
                                                                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                            976
                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                            916
                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                           856
                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                           796
                                                                                                                                                                                                                                                                                                                                                                                                                                                            736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
```

```
THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PRESENT OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
AAX06785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
       misc_feature
                                                                                                   mat_peptide
                                                                                                                                                                                                      sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                         Secreted protein; human; testis; ga63_6; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human adult testis secreted protein ga63_6 cDNA
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX06785 standard; cDNA; 1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1621. GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACTTTACATAAAATGTTGATCTTCAAAAAAAA 1911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACTTTACATAAAATGTTGATCTTCAAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GÁCGTTGTGCTTCGÁTGGÁGCCÁGGÁGTTCAGCÁCCTTGÁCTCTÁGGCCÁGTTCGGÁTGÁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccaaacracrerricerricaaaaeccaecaerercreareaeaaaaccecaarceaaaeere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTAGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGAGTTATATCCAGTAC 1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ceeerre e ca ce a mana de crementa de la composition della composi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGGCCGCTTTACGGGCTGGÁTTTGTÁCGGTGGGCTCCÁCÁTGGÁCTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  drcadccctridctridccrccadadccrdrccatroddcaaccaddraddccccadaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCAGCCCCTTGCCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
/note= "this region is 24(c)" 224. .679
                                                                                                transmembrane
112. .1671
                                                                                                                                                                                                      /*tag= a
//note= "this region (minus the stop codon at 1672. .1674)
is specifically claimed in Claim 24(b)"
                                                                                                                                            product= "putative
                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                   .1674
                                                                                                                                                                                                .111
                                                                                                                                                                         σ
                                                                                                             region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                 specifically claimed in
                                                                                                                                  sequence,
                                                                                                                                  õ
                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1336
                                                                 Ś
                                                                                                                       뮍
                                                                                                                                                              Ş
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                              Matches 1594;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUN-1997;
17-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9857976-A1
                       185
                                                                   191
                                                                                                                     125
                                                                                                                                                                    131
                                                                                                                                                                                                                     65
                                                                                                                                                                                                                                                                  71
                                                                                                                                                                                                                                                                                                                                                               11
                                                                                                                                                                                                                                                                                                                   ഗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MJ,
```

```
This cDNA clone, termed ga63 6, codes for a novel human secreted protein CC (see AAW88403). The full-length clone was isolated from a human adult certified control of the amount of the control of the amount of the control of the contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotides encoding secreted human proteins - are demonstrated brain, adult testes, adult uterus, adult trachea neural tissue cDNA libraries, used as, e.g. vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 24(a); Page 84-85; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-095321/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEMY ) GENETICS INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mccoy JM,
MJ, Howes!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-00878715.
98US-00098588.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US012516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
/note=
24(d)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lavallie ER,
f, Fechtel K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
"this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    region is specifically claimed in Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treacy M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Spaulding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  derived from
hea or adult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <
```

Sequence 1899 BP; 457 A; 560 C; 477 G; 401 T; 0 U; 4 Other;

```
Similarity
GCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAAACCACGGCTTAGTGCCCGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCT 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGACTCAGGCCCCCACTCCAGGCAGCCCTCTCTCTCTCCTACCGAATACGAACGCTTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATT
                                                                                                                                                                                                                                                                                                                                                                       CGACTCAGGCCTCCACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rectrecereactectidade de la consecución del consecución de la conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GÉTTGTGTĆĆĀĊĠĠĠĀĊĠĊĠĠĠĊĠĠĀŦĊŦŦĊŦĊĊĠĠĊĊĀŤĠĀĠĠĀĀĠĊĊĀĠĊĊĠĊŦĠĠĊŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1494; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
310
                                                                                                                 244
                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      70
```

ď δ 당 S B

ð

```
1265
                                                                                                 1205
                                                                                                                                                     1145
                                                                                                                                                                                  1151
                                                                                                                                                                                                         1085
                                                                     1271
                                                                                                                           1211
                                                                                                                                                                                                                                      1091
                                                                                                                                                                                                                                                                 1025
                                                                                                                                                                                                                                                                                             1031
                                                                                                                                                                                                                                                                                                                        965
                                                                                                                                                                                                                                                                                                                                                  971
                                                                                                                                                                                                                                                                                                                                                                               905
                                                                                                                                                                                                                                                                                                                                                                                                         911
                                                                                                                                                                                                                                                                                                                                                                                                                                    845
                                                                                                                                                                                                                                                                                                                                                                                                                                                               851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                        GGAGAAACCCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCCACACAGAGGCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                              TCATTCGATCAGCCCAGGAAATAGATGAAATGAATGAATATATGATGAGAACTCCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCCTTCCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCCTTGGGAG
TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA
                                         TGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCT
                                                                                                                                                                    ACATGTCTACCTGTGCCCTCTGTGACTTCTGCTTCTGAAGCTGGAGCAGTGCCACTCAG
                                                                                                                                                                                                                                                                TGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGT
                                                                                                                                                                                                                                                                                 TGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAGGCCTGGAAGT
                                                                                                                                                                                                                                                                                                                      GGAGAAAACCCTGGCAGCCTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                             TCATTCGATCAGCCCAGGAAATAGATGAAATGAATGAATATGATGAGAACTCCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAGGGAAAGCAGGAAGAACGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGATGACCTCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCT
                                                                                                              AGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTTGTCAGCCCCT
                                                                                                                                                     ACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAG
                                                                                                                                                                                                         ACATGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGAC
                                                                                                                                                                                                                         ACATGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGAGGGAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCCTTCCAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGCTGTCTGCCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1264
                                                                                                                        1270
                                                                                                                                                     1204
                                                                                                                                                                              1210
                                                                                                                                                                                                          1144
                                                                                                                                                                                                                                   1150
                                                                                                                                                                                                                                                                1084
                                                                                                                                                                                                                                                                                           1090
                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                1030
                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                                                                                                                                                                                                                                         970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                                                                                                                                                                                  904
                                                                                                                                                                                                                                                                                                                                                                                                                                                              910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304
```

```
RESULT 5
AAZZ4890
ID AAZZ4890
ID AAZZ4890
AAZZ4890
AAZZ4890
AC AAZZ
XX AX Huma
XX Huma
XX Huma
XX Coggg
XX cogg
XX coggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; ds; immune system; asthma; lymphocyric disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obseity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; disestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9947540-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ24890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGGCAATCGGAAGGTGTCCCGCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0078563P
98US-0078566P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US005804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80 clone HLWAY54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1450
```

19-MAR-1998; 19-MAR-1998; 19-MAR-1998; 19-MAR-1998; 19-MAR-1998; 01-APR-1998; 01-APR-1998; 01-APR-1998; 98US-0078573P 98US-0078574P 98US-0078576P 98US-0078577P 98US-0078577P 98US-0078579P 98US-0078579P 98US-0078513P 98US-0080312P 98US-0080313P 98US-0080313P

В

δ

밁

S

밁

S

밁

8 뮹

8

밁 Ś 멍 Ś 밁 S 밁 δ 8

Ruben : Wei Y, Shi Y, SM, Ni J, R Endress GA, Rosen CA, A, Duan RD, Į, ц G, Куаw Young PE, H, Ebner æ Feng P, Soppet DR; R, Lafleur DW, Olsen

HS;

(HUMA-) HUMAN

GENOME SCI INC

1999-562050/47. DB; AAY41387.

New isolated human genes, useful for diagnosis and treatment of cancers, neurological disorders, immune diseases, inflammation of o e .g. blood

밁 á B & B

5 В S 뫄 8

Claim 1; Page 346; 484pp; English

Ş

음 성

B 8 DЪ Ş 음 성

B & B & B

```
The invention relates to novel genes ADA39629-ADA40565 and proteins CC ADA40566-ADA41501 for human secreted proteins, useful for preventing, CC treating or ameliorating medical conditions e.g. by protein or gene CC therapy. The polypeptides, nucleic acid molecules, antibodies or their CC diagnosing or treating cancer or other hyperpolities are also useful for preparing a diagnostic or pharmaceutical composition for CC diagnosing or treating cancer or other hyperproliterative disorder. The CC polypeptides and nucleic acid molecules are also useful for detecting, CC preventing, diagnosing, prognosticating, treating or ameliorating cancer CC or other hyperproliferative disorders including neoplasms, autoimmune et disorders (e.g. diabetes, rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis, autoimmune thyroiditis or haemolytic anaemia), haematopoietic or haematological disorders (e.g. anaemia, cc inflammatory disorders (e.g. ischaemia reperfusion injury, inflammatory bowel disease or Crohn's disease), neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. atherosclerosis, myocarditis), infectious diseases (bacterial, fungal or viral infections including HIV/AIDS), or wound healing and consecutive or providing immunological probles for differential identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as consecutive for providing immunological probes for differential identification of the tissues immunohistochemistry assays. Note: The sequence data for this patent did not form part of the printed specification, but was fully bublished pot_sequences.
Query Match
Best Local Similarity
Matches 1794; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing preventing or treating cancer or other hyperproliferative disorder asthma, allergies or AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                  Sequence 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-2002; 2002WO-US008123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; secreted protein; cancer; hyperproliferative disorder; rheumatoid arthritis; autoimmune disorder; haematopoietic disorder; anaemia; allergic reaction; asthma; cardiovascular disorder; wound healing; cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vulnerary; cardiant; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         secreted
      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ID NO 322; 3205pp; English.
                                                                                  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Z.
                                                                               461 A; 565 C; 472 G; 394 T;
                      67.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCI INC
  Score 1284; D:
Pred. No. 0;
0; Mismatches
    0
                                           DB
                                         8;
                                                                               0
    ω
••
                                                                               U; 0 Other;
                                         Length 1892;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for diagnosing,
    ω
--
    Gaps
                                                   Ś
                                                                                                밁
                                                                                                                                   Ś
                                                                                                                                                                          망
                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્શ
                                                           1053
                                                                                                982
                                                                                                                                     993
                                                                                                                                                                            922
                                                                                                                                                                                                                 933
                                                                                                                                                                                                                                                        862
                                                                                                                                                                                                                                                                                               873
                                                                                                                                                                                                                                                                                                                                      802
                                                                                                                                                                                                                                                                                                                                                                          813
                                                                                                                                                                                                                                                                                                                                                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ü
                                                     TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGAGTCCTTGG
                                                                                                                    CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAA 1052
                                                                                                                                                                                                    AGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAAACCCTGGCAG
                                                                                                                                                                                                                                                                              AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                          GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                        CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTATGCCAAGAGAGTCCTGTGTTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCCTCTCTCCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                      TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGG
                                                                                                                                                                                                                                                                                                                                      GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACAAGAACACAAGCAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                            AGATGAAATGAAATGAAATATGATGAGAACTCCTACTGGAGAAACCAAAAACCCTGGCAG
                                                                                                                                                                                                                                                        AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGCTCCTGGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1040
                                                           1112
                                                                                                                                                                                                                 992
                                                                                                                                                                                                                                                        921
                                                                                                                                                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                          872
                                                                                                                                                                                                                                                                                                                                                                                                                 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                        812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
```

```
RESULT 7
ADC73578
ID ADC7
XX
AC ADC7
XX
AC ADC7
XX
DT 01-J
XX
BE Huma
XX
KW anti
KW anti
KW anti
KW anti
KW anti
KW then
KW theu
KW theu
KW theu
KW theu
KW syst
KW theu
KW syst
KW thum
XX
BY
KW thum
XX
BY
N
BY
N
BO20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                             antianaemic; antirheumatic; antiarthritic; antiinflammatory; antithyroid; antiparkinsonian; neuroprotective; dermatological; nephrotropic; antiparkinsonian; neuroprotective; nootropic; antibacterial; virucide; fungicide; antiparasitic; antiarteriosclerotic; vulnerary; cytostatic; haemopoietic; haematologic; anaemia; autoimmune disorder; cytostatic; rheumatoid arthritis; inflammation, Grave's disease; diabetes; systemic lugus exythematosus; glomerulonephritis; neurodegenerative; Parkinson's; Alzheimer's; wound; hyperproliferative; atherosclerosis; fungal; parasitic infection; gene therapy; human; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ergriaercegacceracreacarrrecrragarragaacaacagreecagagagaggeca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCTGCCCACGITCICIAITGITITGAGACCCCATTGCTTTCAGGCTGCCCCITCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rcreareagaaaaccecaarcegaagerercceeargaearercreeagaarcera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGATGAGAAACCGCAATCGGAAGGTGTCCCCGCATGAGATGTCTGCAGAATGAGACTTA 1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ĠĀŦŦŦĠŦĠĀĊĀĊĀĠĀĊŦĀŦĀŦĊĊĀĠŦĀĊĊĊĀĀĀĊŦĀĊŦĠŦŦĊĊŦŤĊĀĀĀĀĠĊĊĀĠĊĀĠŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGA-TTCCCTACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      regertecké a rega de la region 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCG 1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  carcadeaaccaderadedrocecadaareadedecaderritadedecidericaarritataced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ardedakakerreceakadaerecerrie-eadeceerreceriecereceakadecerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rigac rick riger i red a recent de la compara de la compar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein-related DNA - SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1279
                                                          밁
                                                                                                                                5
```

```
WPI; 200
P-PSDB;
                                                                                                                    21-MAR-2001;
19-JUL-2001;
13-NOV-2001;
                                                                                                             (HUMA-) HUMAN GENOME
                                                                                                                                  19-MAR-2002;
                                                                                                                                         08-MAY-2003
                                                                                            2003-430516/40
DB; ADC74193.
                                                                                                      Ruben
                                                                                                                   ; 2001US-0277340P.
; 2001US-0306171P.
; 2001US-0331287P.
                                                                                                                                  2002WO-US008277.
                                                                                                             SCI
```

New human secreted polypeptide for diagnosing, preventing or treating hematopoietic or hematologic disorders (e.g. anemia), autoimmune disorders (e.g. diabetes) or hyperproliferative disorders (e.g. cance: cancer õ

SEQ ID NO 211; 2272pp; English.

The invention relates to a novel human secreted polypeptide comprising a CC defined sequence given in the specification. The polypeptide, nucleic CC acid molecule, antibody, agonist or antagonist of the invention may be useful for preparing a composition for diagnosing or treating a CC disorders such as rheumatologic disorder such as anaemia, autoimume CC disorders such as rheumatoid arthritis, inflammation, Grave's disease, cC neurodegenerative disorders including Parkinson's disease and Alzheimer's CC disease, wounds and hyperproliferative disorders including Parkinson's disease and Alzheimer's CC disease, wounds and hyperproliferative disorders including cC parasitic infections. The polypeptide may also be used during gene CC parasitic infections. The polypeptide may also be used during gene CC therapy procedures and for identifying a binding partner by contacting binding partner increases or decreases the activity of the polypeptide. The current sequence is that of the human secreted protein-related DNA of the invention. 0f

Sequence 1892 BP; 461 A; 565 С; 472 G; 394 Т; 0 U; 0 Other;

DB 10;

Length 1892;

```
Ś
                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simi
Matches 1794;
                                                                                             393
                                                                                                                                                            322
                                                                                                                                                                                                                           333
                                                                                                                                                                                                                                                                                             262
                                                                                                                                                                                                                                                                                                                                                        273
                                                                                                                                                                                                                                                                                                                                                                                                                          202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33
eraerarigeeakadadaereergrighteeekadeekareretatreterekeertakekerer
                                  CTACTATGCCAAGAGAGTCCTGTGTTCCGAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 99.7
94; Conservative
                                                                                                                                                                   TTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCTCTACCGTTGCTCCAACCACGT
                                                                                                                                                                                                                                                      éctidakcchátrátehahakcchcegectthágtigecegatiggtigetigtetigetechacettece
                                                                                                                                                                                                                                                                                                    GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                    GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gCTGCTCCTGCCTCTGGCACCTGCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dgarerreredeckargaggaagecagecgerrectreerrecteaecreergaaggr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             refererectáceda a racea a comerción de conservados 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67.8%;
99.7%;
                                                                                                                         rtdadreirietdecadricaerdaeraecarecaecae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Score 1284; DB; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
•
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            u
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                           452
                                                                                                                             381
                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92
```

WO2003038063-A2

1532 1518	473 GATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTG	
1472 1458	413 AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA	
1412 1399	ພໍພ	
1352 1339	293 CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG	
1292 1279	233 ATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTGCTTG	
1232 1220	3 TGACTTCTGCTCGTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA	
1172 1160	113 TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG	
1112 1100	053 TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGATCCTTGG	
1052 1040	3 CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAA 	
992 981	33 AGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAG 	
932 921		
872 861	13 GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT	
812 801	3 ACAGGGGACTAAGGAGGGACGGAGGCTGTGTCTCAGCTGCAGACAGA	
752 741	naacaggaagagcaagaagaaggaacaggaagaggaagga	
692 681	633 CAAGCAGGAGCAAGGAGTGGAGCACAAGGAGCCGACACAAGAACACAAGCAGGAAGA (	
632 621	73 CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA	
572 561	3 CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA	
512 501	.53 CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC	

```
밁
                                                                        Ş
밁
                       Ş
                                                                                                          밁
                                                                                                                                S
                                                                                                                                                                 문
                                                                                                                                                                                       5
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                S
1759
                          1773
                                                                                                           1639
                                                                                                                                       1653
                                                                                                                                                                   1579
                                                                                                                                                                                              1593
                                                                                                                                                                                                                          1519
                                                     1699
                                                                                1713
                                                                                                                                                                                                                                                      1533
                                                                                                                                                                                                                         TCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTA
                CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
                                                                        ACCTGCCCACGTTCTCTATTGTTTTTGAGACCCCATTGCTTTCAGGCTGCCCCCTTCTGGGT
                                                                                                                             CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCCA
CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
                                                     ACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGT
                                                                                                             CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCCACACCCCAGCCCA
                                                                                                                                                                   CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                             CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                           1832
 1818
                                                                                                                                                                                                                                                      1592
                                                       1758
                                                                                 1772
                                                                                                           1698
                                                                                                                                       1712
                                                                                                                                                                    1638
                                                                                                                                                                                              1652
                                                                                                                                                                                                                          1578
```

В S 문 Ś S

밁

S 밁 S 밁

밁

ADD37623 standard; cDNA; 1892 ₿₽

ADD37623;

15-JAN-2004 (first entry)

Human secreted protein encoding sequence #105.

human secreted protein; Antiallergic; Antiinflammatory; Antibacterial; Anti-HIV; Cytostatic; Immunosuppressive; Hemostatic; ss.

Homo sapiens.

WO200290526-A2.

19-MAR-2002; 2002WO-US008279

21-MAR-2001; 2001US-0277340P 19-JUL-2001; 2001US-0306171P 13-NOV-2001; 2001US-0331287P

(HUMA-) HUMAN GENOME SCI INC

Rosen CA, Ruben SM;

WPI; 2003-140218/13.

S

δ

밁 5 밁 δ

B

δ 밁

밁

Ś 밁 Ś 뫄 Ś В ঠ 밁 5 밁 S

뮹

New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing treating allergic or asthmatic disorders, or related immediate hypersensitivity disorders. 유

Claim 7; SEQ ID NO 105; 1323pp; English.

RESULT 8
ADD37623
ID ADD37623
XX ADD3
XX ADD3
XX ADD3
XX Huma
XX huma
XX Huma
XX Homc
XX Hom
XX H The present invention relates to an isolated polypeptide or human secreted protein. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind are useful for preparing a diagnostic or pharmaceutical composition for diagnosing or treating allergic or asthmatic disorders. The polypeptide is also useful for identifying a binding partner by contacting the polypeptide with a binding partner, and determining whether the binding partner increases or decreases the activity of the polypeptide. The polypeptides and nucleic acid molecules are also useful for detecting, preventing, diagnosing, prognosticating, treating or ameliorating inflammatory disorders prognostication, immune disorders, cardiovascular disorders, blood-related disorders, infectious diseases, endocrine disorders, or gastrointestinal The nucleic acids are also useful for chromosome

888888888

Query Match Best Local Similarity Matches 1794; Conserv

3 22

```
identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunological probes for differential identification of the tissues immunohistochemistry assays. The present sequence represents a human secreted protein encoding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T;
                                                                   AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGGTCATTCGATCAGCCCAGGAAAT
                                                                                                AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT
                                                                                                                                                                                                          GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                   a Caldeda cita a de la como de la
                                                                                                                                                                                                                                                                                                                   CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCGCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             c racrarécca a da de receiente de conserva de la co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCACTACCGTTGCTCCAACCACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      decidada da cria con de control d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGCTGCCGGAATCCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cegarchiciccegecaneaggaagecagecigericetricecreactecreagger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67.8%;
                                                                                                                                                                    rcīarcirciaaccciricciciririgerececegaiacaaagi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1284; DB 10
Pred. No. 0;
0; Mismatches :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω,
                                                                   921
                                                                                                                                                                          861
                                                                                                                                                                                                                              872
                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                        812
                                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                                                                                                                                                                                                                                                                                                                                                                                 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92
                          RESULT 9
ADA56130
ID ADA5
XX
AC ADA5
XC
DT 20-N
XX
DT 20-N
XX
DE Gene
XX
KW immu
KW cyto
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                    뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           皮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
immunosuppressive; antiinflammatory; antiasthmatic; antiallergic;
cytostatic; cerebroprotective; neuroprotective; nootropic;
                                                                                                Gene encoding
                                                                                                                                                           20-NOV-2003
                                                                                                                                                                                                                   ADA56130;
                                                                                                                                                                                                                                                                       ADA56130
                                                                                                                                                                                                                                                                                                                                                                                                           1759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         933
                                                                                                                                                                                                                                                                                                                                                                                    CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGGCCA 1832
                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGATGAGAAACCGCAATCGGAAGGTGTCCCGGCATGAGATGTCTGCAGAATGAGACTTA 1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTETETGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGCTCCACATGGACTTCTGGTGTGCCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATCGAGGAGGAGATCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   crtcrgcagcrgccccacacaga-gccrrgcrgdrgcrgrgcrarrcgarcgagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATGAAATGAAATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAG
                                                                                                   human
                                                                                                                                                        (first
                                                                                                                                                                                                                                                                    DNA;
                                                                                                secreted
                                                                                                                                                                                                                                                                  1892
                                                                                             protein
                                                                                                                                                                                                                                                                  ВP
                                                                                          #309.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                981
```

382 453

393 322 333 262 273 202 213 142 153 82 93

밁 5 용양

> 813 742

862 873 В ş 망 ş B 8 В S 밁 Ś 밁 Ş 밁 S 맑 Ş 밁 δ В S 밁 Ś 밁 Ś

693 622 633 562 573 502 513 442

141

272 201 81

```
Cd diagnosing, respiratory disorders, cancers, CNS disorders, or neurodegenerative disorders, or polypeptides comprising an amino acid continuous entropy disorders, or polypeptides comprising an amino acid sequence at least 95% identical to the new sequences. The polypeptides, carcide encoding the polypeptides, agonists or antagonists that binds to the polypeptide, are useful in preparing diagnostic or pharmaceutical compositions for diagnosing, treating or preventing an e.g. immune compositions for crohn's disease), respiratory disorders (e.g. asthma and compositions for Crohn's disease), respiratory disorders (e.g. asthma and compositions ce.g. gastric, ovarian or lung cancer), CNS disease, ce.g. multiple sclerosis or ischaemic brain injury), neurodegenerative cdisorders (e.g. parkinson's disease or Alzheimer's disease), and cardiovascular disorders (e.g. atherosclerosis or myocarditis). The complymic for controlling gene expression through triple helix formation or antisense DNA or RNA, in gene therapy, for identifying individuals from minute biological samples, in forensic biology, and as hybridization composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composes. The polypeptides are useful for as molecular weight markers on composed to the polypeptide of the invention. Note: The sequence data for this patent did form part of the printed specification, but was obtained in electronic format directly from WIPO at the sequence of the polypeptides.
                                                                            Query Match
Best Local Similarity
Matches 1794; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New human secreted polypeptides and polynucleotides, useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or neurodegenerative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cardiovascular; antiarteriosclerotic; gene therapy; human secreted protein; immune disorder; inflammation; respiratory disorder; cancer; CNS disorder; neurodegenerative disorders; inflammatory bowel disease; nephritis; Crohn's disease; asthma; allergy; multiple sclerosis; ischaemic brain injury; Parkinson's disease; Alzheimer's disease; atherosclerosis; myocarditis; chromosome mapping; triple helix formation; antisense gene therapy; forensic biology; ds;
                                                                                                                                                                       Sequence 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 21; SEQ ID NO 319; 1754pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to 592 new human secreted polypeptides useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-MAR-2002; 2002WO-US008278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2002102994-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003-167512/16
                              \mathfrak{U}_{\mathfrak{U}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA57026
Conservative
                                                                                                                                                                          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NS
                                                                                                                                                                            461
                                                                                                   67.88;
99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCI INC
                                                                                                                                                                       A; 565
                                                                            0
                                                                                                   Score 1284;
Pred. No. 0
                                                                                                                                                                     C; 472 G; 394 T; 0 U; 0 Other;
                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                   0
                                                                                                                         DВ
                                                                                                                         10;
                                                                         ω
••
                                                                            Indels
                                                                         ω
                                                                         Gaps
                           92
  밁
                                   δ
                                                                                           뫄
                                                                                                                                         Ś
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ୃଷ୍ଟ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
  1101
                                                                                                                                              1053
                                                                                                                                                                                              982
                                                                                                                                                                                                                                         993
                                                                                                                                                                                                                                                                                            922
                                                                                                                                                                                                                                                                                                                                          933
                                                                                                                                                                                                                                                                                                                                                                                          862
                                                                                                                                                                                                                                                                                                                                                                                                                                        873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                       CTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAA 1052
                                                                                                                                                                                                                                                                                                                          AGATGAAATGAATGAAATATATGATGAGAAACTCCTACTGGGAGAAACCCAAAAACCCTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC
                              TTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTG
                                                                                             TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGATCCTTGG
                                                                                                                                           TACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGG
                                                                                                                                                                                           CCTCCTGCAGCTGCCCCACACAGA-GCCTTGCTGCTGCTGTGCTATTCGATCGTGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCCGACACAAGAACACAAGCAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGCAGGAGCAAGGAGTGGAGCACAGGAGCAGGAGCACAAGAACACAAGCAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACTATGCCAAGAGAGTCCTGTGTTCCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCAGGCTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                                                                                         AGATGAAATGAAATGAATATGATGAGAACTCCTACTGGAGAAACCCAAAAACCCTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                          AGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACTATGCCAAGAGACTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCAGAGACTACCTGCCGTCTCCGTGCAACCCCACGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
```

S

1160 1172 1100 1112 1040

```
S
                                                                  뭥
                                                                                           S
                                                                                                                           В
                                                                                                                                                 Ś
                                                                                                                                                                                 В
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                뭥
                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
             1759
                                                                    1699
                                                                                              1713
                                                                                                                           1639
                                                                                                                                                    1653
                                                                                                                                                                                 1579
                                                                                                                                                                                                           1593
                                                                                                                                                                                                                                        1519
                                                                                                                                                                                                                                                                  1533
                                                                                                                                                                                                                                                                                             1459
                                                                                                                                                                                                                                                                                                                          1473
                                                                                                                                                                                                                                                                                                                                                     1400
                                                                                                                                                                                                                                                                                                                                                                                                            1340
                                                                                                                                                                                                                                                                                                                                                                                 1413
                                                                                                                                                                                                                                                                                                                                                                                                                                       1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1233
                  CTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGGCCA
ĊŦĠŦŦĀĊŦĊĠĠĊĊĊĊŦĀĊŦĊĀĊĀŦŦŦĊĊŦŦĠĠĠŦŦĠĠĀĠĊĀĀĊĀĠŦĊĊĊĀĠĀĠĀĠĠĊĊĀ
                                                                          ACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGT
                                                                                                                              CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGGGTCTATTCTGGCCCAGACCCAGCCCA
                                                                                                              CACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCA
                                                                                                                                                                     CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                      CAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAG
                                                                                                                                                                                                                          TCTGĀTGĀGĀĀĀCCGCĀĀTCGGĀĀGGTĞTCCCGCĀTGĀGĀTGTCTGCĀGĀĀTGĀGĀCTTĀ
                                                                                                                                                                                                                                                TCTGATGAGAAACCGCAATCGGAAGGTGTCCCCGCATGAGATGTCTGCAGAATGAGACTTA
                                                                                                                                                                                                                                                                                  GATTTĠTĠĀĊĀĊĀĠĀĊŤĀTĀTĊĊĀĠTĀĊĊĊĀĀĀĊTĀĊTĠTTĊĊŢŢĊĀĀĀĀĠĊĊĀĠĊĀĠŢĠ
                                                                                                                                                                                                                                                                                                   GATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTG
                                                                                                                                                                                                                                                                                                                                         AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGA-TTCCCCTACCAA
                                                                                                                                                                                                                                                                                                                                                          AGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                    TGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAAAATGTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGCGACACCTCCCACAAGACTCCCTTTG-CAGCCCCTTGCTTGCCTCCCAGAGCCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTGCCTTGCCTCCCAGAGCCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACA
                                                                                                                                                                                                                                                                                                                                                                                                r cacarda de receiva de la como de
                                                        .CGTTCTCTÁTTGTTTTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGT
 1818
                            1832
                                                                                   1772
                                                                                                              1698
                                                                                                                                          1712
                                                                                                                                                                     1638
                                                                                                                                                                                               1652
                                                                                                                                                                                                                            1578
                                                                                                                                                                                                                                                                                                            1532
                                                                                                                                                                                                                                                                                  1518
                                                                                                                                                                                                                                                                                                                                         1458
                                                                                                                                                                                                                                                                                                                                                                                                1399
                                                                                                                                                                                                                                                                                                                                                                                                                           1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1232
```

RESULT 10
AAH99858
ID AAH999858
XX AAH99
XX 16-OC
XX 16-OC
XX Human
XW Antii.
KW Antii. Human; cancer; ulcer; HIV infection; human immunodeficiency virus; KW antiinflammatory; antirheumatic; antiarthritic; immunosuppressive; KW antibacterial; endocrine; cardiant; central nervous system; virucide; KW anti-HIV; fungicide; antimutagen; cardiovascular; antianaemic; anaemia; KW dermatological; antiallergic; ulnerary; antiulcer; osteopathic; eczema; KW neuroprotective; antidepressant; nootropic; antiparkinsonian; infection; KW immunostimulant; gene therapy; antisense therapy; vaccine; inflammation; KW immunostimulant; gene therapy; antisense therapy; vaccine; inflammation; KW cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity; KW cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity; KW genetic disease; haematopoletic disorder; platelet disorder; asthma; KW thrombocytopaenia; osteoporosis; severe combined immunodeficiency; KW allergic rhinitis; diabetes; multiple sclerosis; depression; disorder; asthma; KW allergic rights; dispets; multiple sclerosis; depression; asthma; KW allergic rights; dispets; multiple sclerosis; depression; asthma; KW allergic rights; dispets; multiple sclerosis; depression; Human protein encoding cDNA sequence SEQ ID NO:693 16-OCT-2001 AAH99858 standard; cDNA; 1671 BP

> Isolated human polynucleotides encoding polypeptides, useful for the treatment and diagnosis of e.g. cancer, ulcers and HIV infection. 23-DEC-1999; 99US-00471275 21-JAN-2000; 2000US-00488725 25-APR-2000; 2000US-00552317 (HYSE-) HYSEQ INC. 22-DEC-2000; 2000WO-US035017 WO200153455-A2 2001-457603/49. DB; AAM25917. Liu C, Drmanac RŢ

Page 685-686; 1217pp; English.

AAM25963. The proteins can have activities based on the tissues and cells they are expressed in, such as: antiinflammatory; antirheumatic; chartarthritic; immunosuppressive; antibacterial; endocrine; cardiant; contral nervous system; virucide; antializatic; undocrine; cardiant; correctly antichery; anticapen; cardiovascular; antianaemic; antiaggregant; haemostatic; vulnerary; correctlic; cytostatic; neuropyrotective; antidepressant; nootropic; cardidabetic; cytostatic; neuropyrotective; antidepressant; nootropic; cardidabetic; cytostatic; neuropyrotective; antidepressant; nootropic; cantidiabetic; cytostatic; neuropyrotective; antidepressant; nootropic; cantidiabetic; cytostatic; neuropyrotective; antidepressant; nootropic; correctly antiparkinsonian; and immunostimulant. The proteins and polymucleotides enoding them can be used in gene therapy, antisense therapy and vaccine cytostation. The proteins and polymucleotides are useful for screening for correctly associated with the activity of a protein e.g. inflammation, cutoficial archivits, septic shock, pancreatitis, cardiac dysfunction, cutoficial archivits, cardiac anaphylaxis, viral, bacterial, HIV and fungal consensus, platelet disorders, thrombocytopaenia, wounds, burns, ulcers, correctly, asthma, diabetes, cancer, multiple sclerosis, depression, correctly and disorders, parkinson's disease, neurodegenerative and correctly and correctly and disorders.

Sequence 1671 BP; 361 A; 537 C; 424 G; 349 T; 0 U; 0 Other;

밁 8 밁 S 망 Ś 片 δ 밁 Ş Query Match Best Local Sim Matches 1273; 391 331 577 271 517 457 151 397 91 Similarity GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT CAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTC caderidaaceaarardaaaaaceaederradreeeedarderderderdereereeaeere AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCGCTGCCGGAATCCCCACACTCGTC AAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTC gácaác cererer erecta a cela a racea a acecerre en receita en en esta GGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGG GTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCA 150 61.9%; ilarity 99.8%; Conservative Score 1173; DB Pred. No. 0; 0; Mismatches 0; DB 4 2 Length 1671; Indels 0; Gaps 450 390 636 330 576 270 210 456 516

```
1597
                                                                                                                                                                                                                                                                  1417
                                                                                                                                                                                                                                                                                                  1111
                                                                                                                                                                                                                                                                                                                                     1357
                                                                                              1291
                                                                                                                                                                                                1477
                                                                                                                                                                                                                               1171
                                                                                                                                                                                                                                                                                                                                                                    1051
                                                                                                                                                                                                                                                                                                                                                                                                      1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1117
                                                                                                                               1537
                                                                                                                                                               1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1057
                                                                                                                                                                                                                                                                                                                                                                                                                                     991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAA
                                                                                                                                                                                                                                                                                    GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                      AATACCTGCATCATAACCCCCACAGCCAAGGCCTTGGAAGTACATGGAGGAGGAGGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                       AGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAGATGAAATGAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAGATGAAATGAAATGAAATATATGAGAAACTCCTACTGGAGAAACCAAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGGGCTCCACATG
                                                                                     TCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTAC
                                                                                                                                                                TGTGACTTCTGCTTCGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAA
                                                                                                                                                                                                                                                                 GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                   AATACCTGCATCATAACCCCCACAGCCAAGGCCTTGGAAGTACATGGAGGAGGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                    AGCCTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTTTCACTCTGAATCTCTATCTTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTTTCACTCTGAATCTCTATCTTCCTAACCCCTCTTTTGCTCCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACAAGCAGGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGCAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGGCCTGAGAGGCTCAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACT
                           1365
1671
                                                                                              1350
                                                                                                                                                             1290
                                                                                                                                                                                                1536
                                                                                                                                                                                                                               1230
                                                                                                                                                                                                                                                                 1476
                                                                                                                                                                                                                                                                                                  1170
                                                                                                                                                                                                                                                                                                                                   1416
                                                                                                                                                                                                                                                                                                                                                                   1110
                                                                                                                                                                                                                                                                                                                                                                                                    1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1116
                                                             1656
                                                                                                                               1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    510
```

```
12-AUG-2004 (first entry)

Human PRO7347 encoding cDNA SEQ ID NO:204.

human; PRO; antianaemic; antiarthritic; antiinflammatory; antipsoriatic; antiirheumatic; dermatological; immunostimulant; immunosuppressive; osteopathic; vasotropic; immune related disease; inflammatory immune response; rheumatoid arthritis; osteoarthritis; yvenile chronic arthritis; systemic lupus erythematosus; spondyloarthropathy; systemic sclerosis; spondyloarthropathy; systemic sclerosis; systemic vasoulitie; sarcoidosis; autoimmune haemolytic anaemia; autoimmune disease; immune-mediated skin disease; bullous skin disease; erythema multiforme; contact dermatitis; psoriasis; lymphadenopathy; splenomegaly; leukopaenia; gene; ss.

Homo sapiens.

WO2004043397-A2.
```

성 음

중 음 중

음 성 음 성

New isolated PRO polypeptide e.g. PRO37544, PRO69493, PRO87327 etc, capable of stimulating an immune response, useful for treating diseases such as rheumatoid arthritis, psoriasis, and leukopenia.

12-NOV-2002; 2002US-0425931P

(GETH ) GENENTECH INC.

2004-420080/39.

Bodary S,

Clark H,

٤

Ġ,

Schoenfeld

ŗ

Wood

12-NOV-2003; 2003WO-US036002

Claim 2; SEQ ID NO 204; 326pp; English.

The present invention describes an isolated human PRO polypeptide (I). CC Also described: (I) an isolated PRO nucleic (II) acid encoding (I); (2) a CC vector (III) comprising (II); (3) a host cell (IV) comprising (II); (4) correctly (1); (5) a chimeric molecule (V) comprising (I) fused to a CC heterologous amino acid sequence; (6) an antibody (VI) which specifically binds to (I); (7) a composition of matter comprising (I) an appoint of (I), or (VI) in combination with a carrier; (8) CC treating (ML) an immune related disorder in a mammal, by administering (I) an agonist of (I), an atagonist of (I), an attention with a carrier; (8) CC of expression of a gene encoding (I) in a test sample of tissue cells of expression of a gene encoding (I) in a test sample of trissue cells cobtained from the mammal and in a control sample of known normal tissue cells of the activity of (I); (11) identifying a compound that inhibits the cexpression of a gene encoding (I); (12) identifying a compound that inhibits the composition of a gene encoding (I); (12) identifying a compound that inhibits the composition of a gene encoding (I); (12) identifying a compound that combined the activity of (I); and (I2) stimulating the immune response in a maintable of the activity of (I); and (I2) stimulating the immune response in a nitianaemic, antianthritic, antiinflammatory, antipsoriatic, antiinflammatory, antipsoriatic, costeopathic and vasotropic activities. (I) and (VI) are useful for C diagnosing an immune related disease in amammal. (II) has useful for determining the presence of (I) in a sample suspected of containing c electronic chosen from rheumatoid arthritis, osteoarthritis, useful composition of a properties, systemic vasculitis, sarcoidosis, composition of a properties, systemic vasculitis, sarcoidosis, composition of a properties is, lymphadenopathy, splenomegaly and leukopaenia. The composition in a contact invention.

Sequence 3306 BP; 737 A; 950 C; 821 G; 746 T; 0 U; 52 Other;

RESULT 11 ADO24565 ID ADO24

ADO24565 standard;

XXX

ADO24565;

유 성

밁 δ 밁 S 밁 Ś 뮹 Ś 밁 Ś 뫄 Ş 밁 Ş 밁 S

음 성

```
Query Match
Best Local Similarity
Matches 536; Conserv
                                                                                                                                                                                                                                         Secreted protein; human; cytokine; cellular proliferation; cell movement cellular differentiation; immune system regulator; anti-inflammatory; haematopoiesis regulator; tissue growth regulator; tumour inhibitor; reproductive hormone regulator; chemotaxis; chemokinesis; gene therapy genetic disease; ss.
                                                                                                                                                                                                                                                                                                                           human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĠĊŦŦĊĊAĠĠĀŦĠĠĠĠĀŦŦŦĊĊĊŦĀĊĊĀĀĠĀŦŦŦĠŦĠĀĊĀĠĀĊŦĀŦĀŦĊĊĀĠŦĀĊĊĊĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrdccacdaaddcrdrdaadardrccdadrcrcrdddcrdccadacrdadrrccrra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTTGGCTCCAGACTGAGTTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĠĊĊĠĊŦŤŦŦĀĊĠĠĠĊŤĠĠĀŤŤŤĠŤĀĊĠĠŤĠĠĠĊŤĊĊĀĊĀŤĠĠĀĊŤŤĊŤĠĠŤĠŤĠĊĊĊĠĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĠĊĊĊĊŢŦĠĊŦŤĠĊĊŦĊĊĊĀĠĀĠĊĊŤĠŦĊĊĀŦĊĠĠĊĀĀĊĊĀĠĠŦĀĠĠĠŦĊĊĊĊĀĠĀĀŦĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCCTTGCTTGCCTCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCAGAGGCCAGCCTGCAGCGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGÁCACÁTGTCTÁCCTGTGCCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTGCTGTGCTÁATTCGATCGTGGAGAATÁCCTGCATCATAACCCCCACAGCCAAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28.3%; !nilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                    (first
                                                     97US-0069957p.
98US-0074121p.
98US-0081563p.
98US-0096116p.
                                                                                                                       98WO-IB002122
                                                                                                                                                                                                                                                                                                                 secreted protein coding sequence,
                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 536; DB 12; Length Pred. No. 2.2e-247; O; Mismatches O; Indels
                                                                                                                                                                                                                                                                                                                   SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                    IJ
                                                                                                                                                                                                                                                                                                                   ö.
                                                                                                                                                                                                                                                                                   cell movement;
                                                                                                                                                                                                                                                                                                                   304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                      뮍
                                 δ
                                                                 밁
                                                                                      5
                                                                                                                                              Ş
                                                                                                                                                                               맑
                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                      吊
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents an extended human secreted protein coding sequence of the invention. The secreted proteins can be used in treating or controlling a variety of human conditions. The secreted proteins may or may act as cytokines or may affect cellular proliferation or differentiation or any act as immune system regulators, haematopoiesis regulators, tissue growth regulators, regulators of reproductive hormones or cell movement tumour inhibition activity. The DNAs can be used in forensic procedures to identify individuals or in diagnostic procedures to identify the genes corresponding to the extended cDNAs. They are also useful for constructing a high resolution map of the human chromosomes. They can also be used for gene therapy to control or treat genetic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 964 BP; 258 A; 294 C; 227 G; 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bougueleret L,
          602
                                    629
                                                                                            569
                                                                                                                       482
                                                                                                                                                  509
                                                                                                                                                                               422
                                                                                                                                                                                                         450
                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                 390
                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                       330
                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                              270
                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1999-385906/32.
DB; AAY36055.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     948;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGGCAGGACACAAGGAACACAAGCAAGCAGG
                AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGGACACAAGAACACAAGCAGG
                                                     ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGAGCAA
                                                                     ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTTGGGAGGCCAGGAGCAAGCGCCAG
                                                                                                           caccccactricacagradcagaacgccagaccrrrccagcccrggccrgagaggcrcagca
                                                                                                                            CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGGCTCAGCA
                                                                                                                                                                   TCTCAAGGAGATAGAASCTTCAGCTGAAGTCTCACCCACACAGATGACCTCCCCCATCT
                                                                                                                                                                                     ĊĠŦĊŦĀĊŦĀŦĠĊĊĀĀĠĀĠĀĠŦĊĊŦĠŦĠŦŦĊĊĊĀĠĊĊĀĠŦĊŦĊŦāŦŦĊŦĊŦĊ₩ĊĊŦĀĀĊĀĊ
                                                                                                                                                                                                                                                                               CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                        CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                         CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                                                             GAAGGCAGARACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGGCAGAGACTACCTGCCGTGTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | GGCCGGATCTTCTCCCGGCCATGAGGAAGCCAGCCGCTGGCTTCCCTTCCCTCACTCCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Addickáde ceretre recenhece a haráce a hace en retrede ca cere de recenhece re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGCTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Duclert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               516pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 528; DB
Pred. No. 1.6e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dumas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Milne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Le
1.6e-243;
hes 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T, 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U; 5 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
```

61 149

밁 δ В Ş 문 S 밁 Ś 밁 Ş 8 Ś 밁 Ş 밁 á В

2370

1505 2310 1445 2250 1385 2190 1325 2130 1265 2070 1205 2010 1145 1950 1085 1890

RESULT 12
AAX9773
ID AAX97
XX AAX97
XX AAX97
XX AAX97
XX AAX97
XX Berry
XX Secrity
XX Cell:
XX Homc
XX Hom
XX Ho

sapiens

Extended

13-SEP-1999 .

AAX97739

17-DEC-1997; 09-FEB-1998; 13-APR-1998; 10-AUG-1998;

(GEST )

GENSET

661 989 601 628 541 568 481

449 421

301 329 241 269 181 209 121

17-DEC-1998; 24-JUN-1999.

```
RESULT 13
ADP19006
ADP19006
ADP19006
AC ADP19
XX ADP19
XX Huma:
XX Huma:
XX Homc
XX Homc
XX Homc
XX 15-
XX 17-
PF 15-
XX 17-
PR 15-
XX 17-
PR 15-
XX 17-
PR 15-
XX 17-
PR 17-
PR 19-
PR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-DEC-1998;
09-FEB-1999;
21-JUN-2000;
15-SEP-2000;
          The invention relates to human cDNA sequences that encode human secreted proteins. The invention also relates to an antibody that specifically binds to a polypeptide of the invention and a method of binding the polypeptide to an antibody. The polynucleotides are useful for expressing the entire secreted proteins which they encode and for distinguishing human tissues and cells from non-human tissues and cells, and for distinguishing between human tissues and cells, and for distinguishing between human tissues and cells that do or do not express the polynucleotides comprising the cDNAs. The polynucleotides and polypeptides are useful in forensic procedures or diagnostic procedures to identify individuals with genetic diseases resulting from abnormal expression of the genes corresponding to the cDNAs. The sequences are also useful in gene therapy to control or treat genetic diseases. This
                                                                                                                                                                                                                                                                                                         New isolated polynucleotide encoding secreted polypeptide, useful gene therapy, or in diagnostic procedures to identify individuals genetic diseases resulting from abnormal expression of the genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Duclert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADP19006 standard;
sequence
                                                                                                                                                                                                                                                                          Claim 1; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004110939-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP19006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-2001; 2001US-00978360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                             2004-440404/41.
DB; ADP19411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    secreted polynucleotide #262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGITTCACTCTGAATCTCTATCTTCTACCCTTCTTTTGCTCCCCGGGTACGAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTTGCTCCCCGGGTACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANATAGATGAAATGAATATATGATGAGAACTCCTACTGGAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-IB002122.
99WO-IB000282.
2000WO-IB000951.
2000US-00663600.
                                                                                                                                                                                                                                                                      ID NO 262; 113pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bougueleret
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964
secreted polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88;
                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ļ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jobert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clusel
of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       O
invention
                                                                                                                                                                                                                                                                                                                           for having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
밁
                      S
                                                                     밁
                                                                                                      δ
                                                                                                                                                 뭐
                                                                                                                                                                              δ
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                         뭥
                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSSS
```

```
CC Note: The sequence data for this patent did not form part of the printed CC specification but was obtained in electronic format from USPTO at CC seqdata.uspto.gov/sequence.html.

XX
SQ Sequence 964 BP; 258 A; 294 C; 227 G; 180 T; 0 U; 5 Other;
```

Matches Query Match Best Local Similarity 842 809 929 698 782 722 749 662 689 602 629 542 569 482 509 422 450 362 390 302 330 242 270 182 210 122 150 948; 62 90 30 N CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAG AGGCAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGG AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGG AAGAGGGGCAGAAACAGGAAGAGAAGAAGAGAAGAGGAAGAGGAAGGAAGCAGGAAG AGCACAAGCAGGAGCAAGGAGCTGGAGCACAGGGAGCCCGACACAAGAACACAAGCAGG ACAACGTGGAAGAGCTCCTACAATCCTTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCCAG CCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACCTCACTACCGTTGCTCCAACCA CCAGCTGGACCAATATGAAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT GGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGGATTCGACTCAGGCCCCACTCC AAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAN AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGGCAGGACACAAGAACACAAGCAGG ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCAGGAGCAAGCGCCAG CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCCTGAGAGGCTCAGCA TCTCAAGGAGATAGAASCTTCAGCTGAAGTCTCACCCACCACAGATGACCTCCCCCATCT CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCCAGCCAGTCTCTATTCTCTCWCCTAACAC CGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACAC CCCTTATGCCT CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT GAAGGCAGARACTACCTGCCGTCTCCGTGCAACCCACGCTGCCGGAATCCCACACTCGT AGGCAGCCCTCTCTCTCCTACCGAATACCAACGCTTCTTCGCACTGCTGACTCCAACCTG GGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCC Conservative 27.9%; 99.3%; 0; Score 528; DB 12; Pred. No. 1.6e-243; Mismatches Length 964; Indels 1, Gaps . 389 868 808 628 508 449 361 901 928 841 721 748 661 889 601 541 568 481 421 301 329 241 61 781 269 181 209 121 149 89 1;

902

```
밁
                               S
                                                              밁
                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
ACH27630
                                                                                                                                                                                                 The invention relates to an isolated polynucleotide comprising any one of CC 38043 cDNA sequences, appearing as ACHL2789-ACH50831, whose sequence was CC determined by the technique of SBH (sequencing by hybridisation). Also CC included is a purified polypeptide comprising a sequence corresponding to CC a reading frame of the novel polynucleotide. The nucleic acid sequences CC are useful in diagnostics as expressed sequence tags (BST) for CC in forensics, in assessing biodiversities, or in identifying mutations CC responsible for genetic disorders and other traits. The nucleotide sequences are also useful as hybridisation probes, as oligomers for PCR, CC for chromosome and gene mapping, in the recombinant production of CC protein, or in generating antibodies specific for it. The present sequence is useful for generating antibodies specific for it. The present sequence CC is useful for generating antibodies specific for it. The present sequence CC is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data CC obtained in electronic format directly from USPTO at sequence.html?DocID=20030073623
                                                                                                                       Matches
                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense DNA or RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Drmanac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003073623-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human adult ovary cDNA #6010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACH27630;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACH27630 standard; cDNA; 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (STAC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LABA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DRMA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  w polynucleotide sequences obtained from various cDNA libraries, useful hybridization probes, as oligomers for PCR, for chromosome and gene pping, in the recombinant production of protein, or in generating
                                                                             936 TGAAATGAATGAAATATATGATGAGAAACTCCTACTGGAGAAACCAAAACCCTGGCAGCTT
                                                                                                                       429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2003-615964/58
                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STACHE-CRAIN I
DICKSON M C.
JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; sequencing by hybridisation; SBH; expressed mapping; biodiversity; genetic disorder.
                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RT,
                 CCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAATAC
                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DRMANAC R T.
                                                        TGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LABAT
                                                                                                                      Conservative
                                                                                                                                                                                BP; 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ID NO 14842; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
GCCCCACACAGAGGCCTTGCTGGTGCTATTCGATCGTGGAGAATAC
                                                                                                                                  20.0%;
                                                                                                                                                                            A; 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stache-Crain B,
                                                                                                                                                                            Ç
                                                                                                                    0,
                                                                                                                 Score 379; DB 9;
Pred. No. 9.6e-172;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genetic
                                                                                                                                                                              123
                                                                                                                                                                            G
Ç
                                                                                                                                                                              97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dickson MC,
                                                                                                                                                                           T; 0 U; 10 Other;
                                                                                                                                             Length 469
                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence tag; EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ¥
                                                                                                                 0,
                                                                                                                Gaps
 159
                            1055
                                                         99
                                                                                     995
                                                                                                                 0
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                              Measuring detection
                      The invention relates to a method for the detection of cancer in which change in the expression of 1 or more of 264 specified cancer associate genes, ABZ71694-ABZ71957, or of sequences at least 80% homologous to the in the specimen tissue as compared to normal tissue is observed. The genes are used in detection, diagnosis and treatment of cancer. The especially of stomach cancer. The present sequence is that of a cancer associated polynucleotide of the invention. Note: The present sequence was not given in the printed specification but was isolated using the GenBank accession number given in the DE line
                                                                                                                                                                                               WPI; 2003-093022/08.
                                                                                                                                                                                                                                                                                                                                                                                                            Human; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human full length insert cDNA clone YP42A04 GenBank AF085884
                                                                                                                                                                                                                                  Yoshikawa
                                                                                                                                                                                                                                                                               10-APR-2001;
21-SEP-2001;
                                                                                                                                                                                                                                                                                                                28-MAR-2002; 2002WO-JP003038.
                                                                                                                                                                                                                                                                                                                                          24-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                WO200283899-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ72003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABZ72003 standard; cDNA; 516 BP
                                                                                                                                                                                                                                                          (TAKA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                        2
                                                                                                                                                                                                                                                        TAKARA BIO INC.
                                                                                                                                      Page;
                                                                                                                                                                                                                        Mori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCCACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGCAACCAGGTAGGGTCCCCCAGAATCAGGCCGCTTTTACGGGGCTGGATTTGTACGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGA
                                                                                                                                                              changes in of stomach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGAGATCCTTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCCTCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGGATCCTTGGTTT
                                                                                                                                                                                                                                                                               2001JP-00112039
2001JP-00290193
                                                                                                                                                                                                                       Okamoto
i M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                      266pp;
                                                                                                                                                                                                                                                                                                                                                                                                         stomach cancer; cytostatic; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                             expression cancer and
                                                                                                                                       Japanese.
                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                   Oura
                                                                                                                                                                                                                              Ħ,
                                                                                                                                                           of 264 cancer associated genes for screening of potential anticancer
                                                                                                                                                                                                                                  Mineno
                                                                                                                                                                                                                                ۲
                                                                                                                                                                                                                                  Asada
                                                                                                                                                                                                                                ۲
                                                                                                                                                                                                                                  Kato
                                                                                                                                                                                                                                Ħ,
                                                                                                   associated
                                                                                                                                                                        for
                                                                                                                                                            agents.
                                                                                         to them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             219
```

Sequence 516

ВP;

112 A; 147

C; 139

ç.

118 Ħ,

0

ď, 0 Other

Search completed: March 7, 2005, 23:21:24 Job time: 1125 secs

IOLISIN MAN TO RESIDENCE SHILL

÷

Sequence 52, Appl Sequence 14842, A Sequence 12, Appl Sequence 210, App Sequence 210, App Sequence 210, App Sequence 229, App Sequence 2296, App Sequence 15249, App Sequence 15249, App Sequence 15249, App Sequence 15250, Appl Sequence 22859, Appl

```
201
28796
628
51259
16442
1926
1926
8705
  937.6
471.8
433.8
433.8
408.4
308.4
329.8
329.8
328.4
225.8
200.6
199
                                                                                                                                                                                                                                                                                                                                                          154.6
154.6
154.6
139.8
135.4
126.6
110.6
95.4
88.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Publicat:
APPLICA:
APPLICA:
APPLICA:
TITLE OI
TITLE OI
TITLE OI
FILE BOURENT
CURRENT
CURRENT
PRIOR AI
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
CORRENT
TYPE: I
ORGANIE
PRIOR SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWARE
SOFTWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-148-
  March 7, 2005, 15:17:16 ; Search time 1099 Seconds (without alignments) 10231.701 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                           gttagaggcggcttgtgtcc......tgttgatcttcaaaaaaa 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published Applications NA:*

| cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
| cgn2_6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
| cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
                      GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                               5401638 segs, 2966923429 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                       US-09-559-013E-23
1895
1 gttagaggcggcttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                     score:
                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                    ı
                                                                                                                    nucleic
                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                          Title:
Perfect f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                Run on:
```

Sequence Sequence Sequence

Sequence

ALIGNMENTS

		Appl	Appl	Appl	App	Appl	Appl	Appl	Appl	App	Appl	Appl
	_	23,	41,	53,	124,	, 77	90,	90,	54,	693,	20,	51,
	Description	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence
SUMMAKIES		IS-10-148-641A-23	IS-10-262-666-41	IS-10-085-117-53	US-10-719-993-124	IS-09-746-783-77	IS-09-397-945-90	18-10-653-595-90	IS-10-085-117-54	IS-10-296-115-693	18-10-085-117-50	JS-10-085-117-51
	GI .	7 n	9.	7	8. D	0.	0.	7. U	7	. T	., C	. r
	h DE	5 1	9	9	7	9	2	7	7	7	0	3 1
	Lengt	189	188	188	1892	189	189	189	163	167	184	162
	% Query Match Length DB	100.0	99.5	99.5	99.3	98.0	92.6	95.6	86.1	67.1	59.5	56.1
	Score	1895	1886	1886	1881.8	1856.4	1811.2	1811.2	1632	1271.8	1128.2	1062.6
	Result No.	П	7	m	4	S	9	7	80	6	10	11

0*;* 60

Gaps

ö

Indels

Length 1895;

DB 17; 0;

Query Match
100.0%; Score 1895;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1895; Conservative 0; Mismatches

RESULT 1
US-10-148-641A-23
Sequence 23, Application US/10148641A
Publication No. US20040086852A1
GENERAL INFORMATION:
APPLICANT: Ono, Toshiro and Nakayama, Eiichi
TITLE OF INVENTION: CANCER ASSOCIATED ANTIGENS AND USES
TITLE OF INVENTION: THEREFOR
FILE REFERENCE: L00461.70132.US
CURRENT APPLICATION NUMBER: US/10/148,641A
CURRENT FILING DATE: 2003-03-18
PRIOR APPLICATION NUMBER: US 09/559,013
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/168,353
PRIOR FILING DATE: 1999-12-01
NUMBER OF SEQ ID NOS: 39
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 23
LENGTH: 1895
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE
NAME/KEY: CDS
; LOCATION: (49)(Ib//) // // // // // // // // // // // // //

B & B & B & B & B &

		OY         1261 GTCAGCCCTTGCTTCCCAGAGCTGTCGATCGGCAACCAGGTAGGGTCCCCAGAA 1320           Db         1261 GTCAGCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCAGAA 1320		Oy         1441         CTTAGCTTCCAGAATGGGAATTTCCCTACCAAGATTTGTGACAGACTATATCCAGTAC         1500           Db         1441         CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC         1500	OY 1501 CCAAACTGCTTCCTTCAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG 1560   1501 CCAAACTGCTTCAAAAGCCAGCAGTGTCTCATGAGAAACCGGAATCGGAAGGTG 1560	1561	QY         1621 GACGTTCGATCGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA         1680           Db         1621 GACGTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA         1680	QY         1741 ACCCCATTGGGCCCTTCTGGGTCTGTTACTCGGCCCTACTCACATTTCC         1800           Db         1741 ACCCCATTCAGGCTGCCCTTCTGGGTCTGTTACTCGGCCCTACTACTCGCTTTCC         1800			RESULT 2 US-10-262-666-41 ; Settlemer 41 paralication not and	Publication No. US2010180298A1 ; GENERAL INFORMATION: ; APPLICATION: A DELICATION: ; APPLICATION: A DELICATION:	APPLICANT: Old, logalizo APPLICANT: Hasegawa, Kosei APPLICANT: Hasegawa, Kosei APPLICANT: Matsushita, Hirokazu TITIR OF INVENTION: Cavin Hirokazu	FILE REFERENCE: LOOGE, CALCAR LIBERTS ANTIGENS  CURRENT APPLICATION NUMBER: US/10/262,666  CURRENT FILING DATE: 2002-10-01	FRIOR FILING DATE: 2002-04-19  PRIOR FILING DATE: 2002-04-19  PRIOR FILING DATE: 2002-02-14  PRIOR FILING DATE: 2002-02-14  PRIOR PILING DATE: 2002-02-14	; NUMBER OF SEQ ID NOS: 80
61 GCCGCTGGCTTCCTTCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACTGCCGCA 120		181 CGCTICTICGCACTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCCCGTGCA 240 							721 GAACAGGAAGAGGAAAGCAGGAAGAAGAAGAGGAGAGTAAGGAGGAGGGAG	781 GFGTCTCAGCTGCAGACAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC 840 	CCTTCCTCTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGG 	901 AICCAGGAGCICATICGAICAGCCCAGGAAAIAGAIGAAAIGAA		1021 TIGCIGGIGCTGIGCTATICGAICGIGGAGAATACCTGCATCAITAACCCCCACAGGCGAGG 1080	1081 GCCTGGAAGTACATGGAGGAGGAGTCCTTGGTTTCGGGAAGTCGGTCTGTGACGCCTT 1140	GOSCGGGGGGCALARIGICIACCIGIGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG 1200

1080 1080 1200 1200 1260 1260 1320 1320

1020

```
1501 CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACGGAATCGGAAGGTG 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1800
    CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTACTATGATAATGGAGAAC 900
                                                          TTGCTGCTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                  TTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAG
                                                                                                                                             GCCTGGAAGTACATGGAGGAGAGATCTTGGTTTCGGGAAGTCGGTCTGTGACTCGTT
                                                                                                                                                                                     GGGGGGGGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                           GTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA
                                                                                                                                                                                                                                                                                          TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGGCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGGCGTCTATTCTGCCCACACCCCAACCTGCCCACGTTCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCCATTGCTTTCAGGCTGCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC
                                                                                                                                                                           GGGCGCCACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG
                                                                                                                                                                                                                TGCCACTCCAGAGGCCAGCCTGCAGCACAATGCGACACCTCCCACAAGACTCCCTTT
                                                                                                                                                                                                                                                                 GTCAGCCCCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGAGGTCCCCAGAA
                                                                                                                                                                                                                                                                                                                                CGCTTGCCACGAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                       CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                CTTAGCTTCCAGGATGGGGATTTCCCTACCAGGTTTGTGACACACAGACTATATCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                           CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTGGCGTCTATTCTGCCCACCCCAGCCCAACCTGCCCACGTTCTTTTTTGAG
                                                                                                                                     GCCTGGAAGTACATGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCCAAAAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGGTTGGAGCAACAGTCCCAGAGAGGCCCACGGTGGGAGCTGCGCCCTCCTTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
US-10-085-117-53
                                                                                                                  1021
                                                                                                                                                                                             1141
                                                                                               1021
                                                                                                                                     1081
                                                                                                                                                       1081
                                                                                                                                                                          1141
                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                        1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1621
                      901
                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1861
                                   a
                                                       ò
                                                                        셤
                     ò
                                                                                               ò
                                                                                                            В
                                                                                                                                  8 8 8
                                                                                                                                                                                      යි පි
                                                                                                                                                                                                                           중 음
                                                                                                                                                                                                                                                                  음 상
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                              8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                     के विक
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                 GTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                       CAGTICACTCACTACCGTIGCTCCAACCACGTCTACTATAGCCAAGAGAGTCCTGTGTTCC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                              9
                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                 CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                      TCACCCACCACGATGACCTCCCCCATCTCACCACTTCACAGTGACGAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCACCCACCACGATGACCTCCCCCATCTCACCCCCATCACAGAAACGCCAGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTTCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTTCCTCTTTGCTCCCCGGGTACGAGAGTAGAGTCTACTCCTATGATAATGGAGAAC
                                                                                                                                                                                                                                                                                                  ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                             CAGTICACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCAGCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGAGCCGACACAAGAACACAGGAGGAGGAGGGGCAGAAAACAGGAAGAGAGAGAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACAGGAAGAGGAGGAAAGCAGGAAGGAAGGACAGGGGGACTAAGGAGGACGGGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTAAC
                                                                                                                           Gaps
                                                                                                                           ö
                                                                                                         Length 1886;
                                                                                                                           Indels
                                                                                                        16;
                                                                                                                          ö
                                                                                                        B
                                                                                                     Ouery Match 99.5%; Score 1886; D
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1886; Conservative 0; Mismatches
SOFTWARE: PatentIn version 3.1
SEQ ID NO 41
LENGTH: 1886
                            TYPE: DNA
ORGANISM: Homo sapiens
                                                      NAME/KEY: CDS

LOCATION: (49)..(1680)

CTHER INFORMATION:

US-10-262-666-41
                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                  61
                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                               FEATURE:
                                                                                                                                            8 6
                                                                                                                                                                                8 6
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                           유
상
음
                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

1380

1380

1440 1440 1500 1500 1560 1620 1620 1680 1680 1740 1740

1020 1140 1260 1260 1080 GTCAGCCCCTTGCTTGCCTCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAA 1320 1380 1380 1440 1440 1500 1500 1560 840 CCTTCCTCTTTTGCTCCCCGGGTACGAGGTAGAGTCTACTCCTATGATAGTAGAGAAC 900 1560 1620 1680 1740 841 CCTTCCTCTTTTGCTCCCCGGGTACGAGTAGAGTCTACTCCTATGATAATGGAGAAC 900 960 1740 1860 GAACAGGAAGGAGGAAAAGCAGGAAGAAGACAGGGGACTAAGGAGGGACGGGAGGCT 780 GTGTCTCAGCTGCAGACAGAGCCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC GCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTT AACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGGCTGCCCCCACAGAGGCC TTGCTGGTGCTGTTTCGATCGTGGAGAATACCTGCATCATAACCCCCCACAGCCAAG GCCTGGAAGTACATGGAGGAGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTACACTT 1201 TGCCACTCAGAGGCCAGCCAGCAGCACAACAATGCGACACCTCCCACAAGACTCCCTTT GGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAG TGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTT TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG 1681 GCTGGCGTCTATTCTGCCCACCCCAGCCCCAACCTGCCCACGTTCTTGAG 1681 GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTTTTGAG 1741 ACCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTCC CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAAGACTGAGTTC TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCCATTGACCCTAGGCCCAGTTCGGATGA 1621 GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGA ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1021 721 781 841 901 901 961 961 1081 1081 1141 1141 1201 1741 1021 1261 1261 1321 1321 1381 1381 1441 1441 1501 1501 1561 1621 1561 엄 ò ò g ò ద ò 셤 ઠે g à g ò g d ð ò ద 셤 ò ò 셤 8 6 ર્જ 8 & 8 ò g ð ద à Q ò ö 300 GCCGCTGCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 120 120 240 240 300 360 360 420 480 480 540 540 600 600 780 9 9 GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCCGGCCATGAGGAAGCCA TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAAACGCCAGACC ACCCACGGCTGCCGGAATCCCACACTCGTCCAGGTGGACCAATATGAAAACCACGGCTTA 241 ACCCAGGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC TICCAGCCCTGGCCTGAGGCTCAGCAACGTGGAAGAGGCTCCTACAATCCTCCTTG CAGTICACICACTACCGTIGCICCAACCACGICIACIAIGCCAAGAGAGAGICCIGIGIICC GAACAGGAAGAGGAAAGCAGGAAGAAGGACGAGGGACTAAGGAGGGAACTAAGGAGGGGAGGCT Gaps ; 0 Length 1886; METHODS FOR CANCER Indels . 0 DB 17; APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TILE OF INVENTION: NOVEL COMPOSITIONS AND MET
FILE REFERENCE: 529452000121
CURRENT APPLICATION NUMBER: US/10/085,117
CURRENT FILING DATE: 2002-02-27
PRIOR PILICATION NUMBER: US 09/798,586
PRIOR PILICATION NUMBER: 2001-03-02
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 53
LENGTH: 1886 Query Match 99.5%; Score 1886; D Best Local Similarity 100.0%; Pred. No. 0; Matches 1886; Conservative 0; Mismatches Sequence 53, Application US/10085117 Publication No. US20030232334A1 GENERAL INFORMATION: ORGANISM: Homo sapiens US-10-085-117-53 TYPE: DNA -Н 61 121 121 61 181 241 361 301 301 361 421 481 481 541 541 601 661 421 601 661 721

ð g ò 셤. 상

g & g à g à

쉽 ò ద ò g õ g

ઠે

ACTCAGGCCCCCACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTTC	Db 241	OY 367 ACTCACTACCGTTGCTCCAACACGTCTACTACTACTACAAGAGAGTCTGTGTTCCAGGCA 426  361 ACTCACTACCGTTGCTCCCAACACCACGTCTACTACTACAAGAAGTCCTGTGTTCCCAGCCA 426  361 ACTCACTACCGTTGCTCCAACCACGTCTACTATACCAAGAAGTCCTGTGTTTCCCAGCCA 420	427 GICTCTAITCTCACCTAACACTCTCAAGAGATAGAAGCTTCAGCTGAAGTCTCACCC	QY         487 ACCACGATGACCTCCCCCATCTCACCCCACTTCACAGACGCCAGACCTTCCAG         546										3CCTTGGGCGG 114             3CCTTGGGCGG 114	
DD   1744 ACCCCATTGAGGTGCCCTTCTGGGTCTGTTACTCGGCCCTACTCACTTTCC 1803	RESULT 5 US-09-746-783-77 ; Sequence 77, Application US/09746783 ; Publication No. US20030044935A1	APPLICANT Jacobs, Kenneth  APPLICANT MCOy, John M.  Lavallie, Edward R.  Racie, Lisa A.	Treacy, Maurice Spaulding, Vikki Agostino, Michael J. Howes, Steven H.	TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES  NUMBER OF SEQUENCES: 231	CORRESPONDENCE ADDRESS: ADDRESSEE: Genetics Institute, Inc. STREET: 87 CambridgePark Drive	STATE: MA COUNTRY: U.S.A. ZIP: 02140	y disk ompatible PC-Dos/Ms-Dos Release #1 0 Wood	CURRENT APPLICATION DATA:  APPLICATION NUMBER: US/09/746,783  FILING DATE: 21-De-2000  CLASSIFICATION: CURROWN:	HTORNEY/AGENT INFORMATION:  NAME: Milasincic, Debra J.  REGISTRATION NUMBER: 46,931  TELECOMMUNICATION INFORMATION:	; TELEPHONE: (617) 227-7400 ; TELEPAX: (617) 742-4214 ; INFORMATION FOR SEQ ID NO: 77: ; SEQUENCE CHARACTERISTICS:	i LENGTH: 1899 base pairs i TYPE: nucleic acid i STRANDEDNESS: double i TOPOLOGY: linear	н	Ouery Match Best Local Matches 187	1 7	

PRIOR FILING DATE: 1998-04-01  PRIOR APPLICATION NUMBER: 60/078,578  PRIOR PILING DATE: 1998-03-19  PRIOR FILING DATE: 1998-03-19  PRIOR FILING DATE: 1998-03-19  PRIOR FILING DATE: 1998-03-19  PRIOR FILING DATE: 1998-04-01   Ouery Match 95.6%; Score 1811.2; DB 10; Length 1892; Best Local Similarity 99.4%; Pred. No. 0; Matches 1860; Conservative 0; Mismatches 8; Indels 4; Gaps 4; Qy 24 GGACGGGGGGGGATCTTCTCCATGAGGAAGCCAGCCGCTGCTTCCTTC	Db 13 GGGACCGGACGGATCTTCTCCGGCCATGACGAAGCCAGCC	QY         144 CACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTGGCACTGCTGACTCC         203	Qy         204 AACCTGGAAGGCAGAGACTACCTGCCGTGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC         263           193 AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC         252	OY 264 ACTICGTCCAGGTGGACAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTC 323	Oy 324 CAACCTCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCGTTGCTC 383	384 CAACCACGICTACTAIGCCAAGAGICCIGIGITCCCAGCCAGICITTAITCICTCACC 	Qy 444 TAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCC 503	Oy 504 CATCTCACCCACTTCACAGTGACGCCAGACCTTCCAGCCTGGCCTGAGAGGT 563	Qy         564 CAGCAACAACGGGAGGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAGC         623	Oy         624 GCCAGAGCACAAGCAGAAGAAGTGGAACACAAAGAACACAA 683	QY         684 GCAGGAAGAGGCAGAAACAGGAAGAGCAAGAAGAAGAAGA	Qy 744 GGAAGAAGGACTAAGGAGGACGGGAGGCTGTGTCTCTGGCTGCAGACAC 803	
	Qy     1507 TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCGC 1566       Db     1501 TACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGC 1560       Qy     1567 ATGAGATGTCTGCAAATGAGACTTACAGTGCGTGAGAAAGTGAGGACGTT 1626		Qy 1686 CGTCTATTCTGCCCAACCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCC 1745	OY 1746 ATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGG 1805	OY 1806 TTGGAGCAACAGTCCCAGAGAGGCCACGGTGGGAGCTGCGCCCTCCTTAAAAGATGACT 1865 	Qy 1866 TTACATAAAATGTTGATCTTCAAAAAAA 1895 	RESULT 6 US-09-397-945-90 ; Sequence 90, Application US/09397945	; Publication No. US20030065139A1 ; GENERAL INFORMATION: ; APPLICANT: Human Genome Sciences, Inc. et al. ; TITIE OF INVENTION: 95 Human secreted professes	; FILE REFERENCE: PZ027P1 ; CURRENT APPLICATION NUMBER: US/09/397,945 ; CURRENT FILING DATE: 1999-09-10.	AFFLICATION NUMBER: FCI/0039/ APPLICATION NUMBER: 60/078,56 FLING DATE: 1998-03-19	APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER: FILING DATE: 1998-03	FILING DATE: 1998-03 FILING DATE: 1998-03 FILING DATE: 1998-03	

ω

ò 쉽 ò g à g ò 셤

g ò

ò qq ò g ò a ò 셤 ò g ઠે g ò 요 장

```
133 CACTCCAGGCAGCCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCC 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84 cendaaasansersecrecerecerenses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144 CACTCCAGGCAGCCCTCTCTCTCTACGAATACGAACGCTTCTTCGCACTGCTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264 ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204 AACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCAACGGCTGCCGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193 AACCTGGAAGGCAGAGACTACCTGCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                   US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-53-595-90

US-10-50-50-90

US-10-50-50-90

US-10-50-90

US-10-50-90

US-10-50-90

US-10-50-90

US-10-50-90

US-10-90

US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.6%; Score 1811.2;
99.4%; Pred. No. 0;
ive 0; Mismatches
                                        1884 TICAAAAAAA 1895
                                                                              1869 TTCAAAAAAA 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 99.4
Matches 1860; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-653-595-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                   셤
                                          ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                             CCCTGGCAGCTTCCTGCAGCTGCCCACACAGGCCTTGCTGGTGGTGCTATTCGAT 1043
                                                                                                                                                                                                                                                                                                          CGTGGAGAATACCTGCATCATAACCCCCACAGGCCTGGAAGTACATGGAGGAGGA 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864 ACGAGAAGIAGAGICTACICCIAIGAIAAIGGAGAACAICCAGGAGCIGAIIGGAICAGC 923
                                                                                                                                                                                                CCAGGAAATAGATGAATGAATGAATTATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                                                                                                                                                                                                            913 CCAGGAAATAGATGAAATGAAGATATATGATGATGAGAACTCCTACTGGAGAAACCAAAA 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGACTTACAGTGCGCTGACCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA 1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCACAC 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCCAG 1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGGGCCACGGTGGGGCCTGCTTAAAAGATGACTTTACATAAAATGTTGATC 1883
                                                                                                                                             GATCCTTGGTTTCGGGAAGTCGGTCTGACAGCCTTGGGCGGGGACACATGTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCCTCTGTGACTTCTGCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCCTGTCCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGCCGGCTTTTACGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITGIACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1391 AGATGTCCGAGTCTCTGGGTGGCTCCAAGTTCCTTAGCTTCCAGGATGGGGA-TT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCTACCAAGATTTGTGACACAGACTATTCCAGTACCCAAAACTACTGTTCCTTCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1524 CCACCAGTGTCTGATGAGAAACGGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1750 CTICHGGGTCTGTTACTCGGCCCCTACTCATTCCTTGGGTTGGAGCACACAGTCCCG
                                                                                                                                                                                                                                                                               984
                                                                                                                                                                                                                                                                                                                   973
                                                                                                                                                                                                                                                                                                                                                           1044
                                        804
                                                                                                                                                                                                  924
                                                                                                                                                                                                                                                                                                                                                                                                                                         1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1764
```

143

음 상 음

8 요. 상 셤

g ò

83 72 203

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

1450	RESULT 6   US-117-54
384 CAACCACGTCTACTATGCCAAGAGGTCCTGTGTTCCCAGCCAG	

December   1321	Oy 331 CCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCAC
243   AACCHAGGGTTTAGTCCCAATGGTCCTCCCACCTCCTCCTCTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCCTCTTAGTTTAGTCCTCCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCTTCTAGTTTAGTCCTCTCTAGTTTAGTCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCCTCTCTAGTTTAGTCTCTC	

```
regaagrecrecrecreseracacererrecerreagaar---creasecrea
                                                                                                                                                                                                                                                                                            CCTGGAAGGCAGAGACCACCTGCCGCCTGCCACCCCACGCCTGCCGGAACCCCACTC
                                                                                                                                                                                                                                                                                                                                                                     TCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTTGCTCCCA
                                                                                                                                                                                                                                                                                                                                                                                   TCGTTCAGTTGGATCAATATGAAAACCACGGATTGGTACCAGATGGTGCTGTTCGCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                 ACCICCTIATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTCCCTTATGCTTCCTGGTTTGAGTCCTTCTGCCAGTTTGCTCAGTATCGTTGCTCCA
                                                                                                                                                                                                                                     TGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           370 ACCATGTCTACTATGCCAAGAGGGTCCGGTGCTCCCAGCCCGTCTCCATCCTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCAGGCAGCCCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAA
                                                                                                                                                                                                                                                                                                                          CCTGGAAGGCAGAGACTACCTGCCGTCCGTGCAACCCACGGCTGCCGGAATCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCACCCCACTTCACAGTGACAGACGCCAGACCTTCCAGCCCTGAGCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              490 TTGTGTCCCATGCCACAGAACACCAGGCCTTCCAGCCTTGGCCTGAGCGGCTCA
                                                                                                                                                                                        550 ACAACAACGGGGGGGGGGCTGCTGCAGTCATCCTTGTCCCTGGGAGGCAAGGACCAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               510 GCAGTCGGAGACCAGGCCA---GGAGCAGCACAAGCAGGAGCAGATCCAAGAACATAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGCCCAAGTTTCAATCCCAGTCACTGTCTTCCAACCCGTCCTTCTTCATCACCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGAAGAGGGCAGAAACAGGAAGAGC --- AAGAAGAGAACAGGAAGAGAGGGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTTAACCCTTCCTCTTTTGCTCCCCGGG
                                                                                                                                              Length 1840;
                                                                                                                                                                   15;
                                                                                                                                            Score 1128.2; DB 17; Lengt
Pred. No. 0;
0; Mismatches 398; Indels
FILE REFERENCE: 529452000121
CURRENT APPLICATION NUMBER: US/10/085,117
CURRENT FILING DATE: 2002-02-27
FRIOR APPLICATION NUMBER: US 09/798,586
FRIOR FILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 361
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 50
LENGTH: 1840
                                                                                                                                             59.5%;
                                                                                                                                            Query Match 59.5
Best Local Similarity 77.5
Matches 1422; Conservative
                                                                                                TYPE: DNA
CORGANISM: Mus musculus
US-10-085-117-50
                                                                                                                                                                                                             13
                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                    130
                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                      310
                                                                                                                                                                                                                                                                                                                                                                                                                                                            386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               995
                                                                                                                                                                                                                                                                               146
                                                                                                                                                                                                                                                                                                                          206
                                                                                                                                                                                                                                                                                                                                                                      566
                                                                                                                                                                                                                                                                                                                                                                                                                 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                787
                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               장. 점
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                              1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1170
                                                                                                                                                                                               1236
                                                                                                                                                                                                                                                                                                                                                                               1296
                                                                                                                                                                                                                                                                                                                                                                                                      1050
                                                                                                                                                                                                                                                                                                                                                                                                                           1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1656
                       916
                                            570
                                                                876
                                                                                     AACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGAGGCCAGGAGCAAGCGCCAGAAG
                                                                                                            936
                                                                                                                                  690
                                                                                                                                                      966
                                                                                                                                                                            750
                                                                                                                                                                                                                        810
                                                                                                                                                                                                                                                                    870
                                                                                                                                                                                                                                                                                                                930
                                                                                                                                                                                                                                                                                                                                                          990
             CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                         CCCCACTTCACAGAGACAGAACGCCAGACCTTCCAGCCTGAGAGAGGCTGAGCACCACTGAGAGGCTGAGAACCCTGAGAGGCTGAGAGGCTGAGAGGCTGAGAAC
                                                                                                GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                                     GGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGCGCGACACATGTCTACCTGTGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGAGCGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGGAAA
                                                                                                                                                                                                                                            AAGTITCACTCTGAATCTCTATCTTCTAACCCTTCCTTTTTGCTCCCCGGGTACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                    AGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                               AATACCTGCATCATAACCCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCA
                                                                                                                                                                                                                                                                                                             GTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAA
                                                                                                                                                                                                                                                                                                                                                         ATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-085-117-50
; Sequence 50, Application US/10085117
; Publication No. US20030232334A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTGGGCTCCACATG 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1657 GGTGGCTCCACATG 1671
                                                               817
                                                                                                        877
                                                                                                                                                                                                                                                                                        1117
                                                                                                                                                                                                                                                                                                                                  1177
                                                                                                                                                                                                                                                                                                                                                                                                                         1297
                                                                                                                                                                                                                                                                                                                                                                                                                                               1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1537
                     757
                                          511
                                                                                     571
                                                                                                                               631
                                                                                                                                                    937
                                                                                                                                                                                                                                                                                                                                                                              1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1597
 451
                                                                                                                                                                           691
                                                                                                                                                                                                                       751
                                                                                                                                                                                                                                                                  811
                                                                                                                                                                                                                                                                                                             871
                                                                                                                                                                                                                                                                                                                                                        931
                                                                                                                                                                                                                                                                                                                                                                                                    991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1351
             6 음
                                                         g
                                                                                 ò
                                                                                                     g
                                                                                                                              ઠે
                                                                                                                                                  셤
                                                                                                                                                                                             g
                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                            8 B S
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
 ઠે
                                                                                                                                                                          ઠે
                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

145 129 205

82 72

Gaps

385

369 445 429 505 489 565

625 549

609 685 999 742 726 846

802 786

			ν <sub>1</sub>	Sn Oa	ĕ &	음 <i>장</i>	d y	da Vo	qa ya	g &	a vo	g &	g <i>V</i>	8 &	g &	qa d	Š
863 TACGAGAAGTAGACTCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAG 922 		983 ACCTRGCAGCTTCCTGCAGCTGCCCCACAGAGGCCTTGCTGGTGCTGCTATTCGA 1042 	1043 TCGTCGAGAATACCTGCATCATAACCCCCACAGGCCTGGAAGTACATGGAGGAGG 1102 					1343 ATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAGGCTGTG 1402 									1801 GAGAGGTGCATGATGGGAGCTCCGAGTGCCTTGAA 1835
& g	\$ A	& 8	& g	දු පු	g &	<i>∂</i> 43	ф 6	g g	ъ д	දි අ	ç q	ò a	රු පු	65 G	λ α	ò 4	3

49 ATGAGGAAGCCAGCGGCTGGCTTCCTTCCTTCAAGGTGCTGCTGCTGCTCTTCTTG 108 109 GCACCTGCCGCAGCCCCAGGATTCGACTCAGGCCCCCACTCCAGGCAGCCCTCTCTCCT 168 228 177 288 348 297 349 GAGTCTTCTGCCAGTTCACTCACTACGTTGCTCCAACACGTCTACTATGCCAAGAGA 408 468 528 418 TCAGCAGAAGTTCCTCCCACTTCCATGACCACCCCCATTGTGTCCCATGCCACAGCCACA 477 529 GAACGCCAGACCTTCCAGCCCTGACGTCAGCAACAACGTGGAAGAGCTCCTA 588 537 589 CAATCCTTGTCCCTGGGAGGCCAGGAGGAAGCACAGAGCACAAGGAGGAGGAAGGA 648 538 CAGTCATCCTTGTCCCTGGGAGGCAACCAACAGGAGCAGTCGGAGAGCAGCCAA---G 594 708 714 766 GAGGGACGGGAGGCTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAA 825 GGGGTCTGGAGTCAGTGTCCAGGCTCAGACTCAGAGCCCAAGTTTCAATCCCAG 774 169 ACCGAATACGAACGCTTCTTCGCACTGCTGACCTGGAAGGCAGAGACTACCTGC 229 CGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCAGGTGGACCAATATGAA 289 AACCACGGCTTAGTGCCCGATGGTGTCTGCTCCAACCTCCTTATGCCTCCTGGTTT GTCCTGTGTTCCCAGCCAGTCTCTTTCTCTCTAACACTCTCAAAGAAATAGAAGCT 469 TCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACCACTTCACAGTGACA Gaps 56.1%; Score 1062.6; DB 17; Length 1623; 79.9%; Pred, No. 6.3e-312; Live 0; Mismatches 314; Indels 15; NUMBER OF SEQUENCE OF SEQUENCE SEQUENCE OF SEQUENCE SEQUENCE OF SEQUE Query Match Best Local Similarity 79.9° Matches 1306; Conservative 409 649 셤 ò 셤

g

8 8

8 g ઠે g 8 g δ 名 ઠે ద ò g δ 엄

```
62 GGTGCTCCTGCCTCTGGCACCTGCCGCAGGATTCGACTCAGGCCTCCACCC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 AGGCAGCCCTCTCTCTCCTACCGAATACCAACGCTTCTTCGCACTGCTGACTCCAACCTG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             150 AGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182 GAAGGCAGARACTACCTGCCGTCCCGTGCAACCCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 GGTGCTGCTGCCTCTGGCACCTGCCGCAGCCCCAGGATTCGACTCAGGCCCCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGTTGTCTGCTCCAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            - See File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 937.6; DB 1.
Pred. No. 5.2e-274
3; Mismatches 3.
CURRENT APPLICATION NUMBER: US/09/978,360A;
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: US 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR PILING DATE: 1997-12-17
PRIOR PELLORATION NUMBER: US 60/074,121
PRIOR FILING DATE: 1998-02-09
PRIOR FILING DATE: 1998-04-13
PRIOR FILING DATE: 1998-06-10
PRIOR PELLORATION NUMBER: US 60/096,116
PRIOR PELLORATION NUMBER: US 60/096,116
PRIOR FILING DATE: 1998-08-10
PRIOR FILING DATE: 1998-01-10
PRIOR FILING DATE: 1998-11-13
PRIOR FILING DATE: 1998-11-13
PRIOR FILING DATE: 1998-11-17
PRIOR PELLORATION NUMBER: US 09/191,997
PRIOR FILING DATE: 1998-11-17
PRIOR FILING DATE: 1998-12-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PERATURE:
NAME/KEY: CDS
LOCATION: 21..527
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 21..95
OTHER INFORMATION: SCOTE 8.5
OTHER INFORMATION: SCOTE 8.5
OTHER INFORMATION: SCOTE 8.5
OTHER INFORMATION: SCOTE 8.5
FEATURE:
NAME/KEY: polyA signal
LOCATION: 921..926
FEATURE:
NAME/KEY: CONTRIBE:

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 99.3
Matches 948; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: polyA_site
; LOCATION: 953..963
US-09-978-360A-262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $ g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 262, Application US/09978360A
Publication No. US20040110939A1
GENERAL INFORMATION:
BAPLICANT: Edwards, Jean-Baptiste Dumas Milne
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
APPLICANT: Jobert, Severin
APPLICANT: Clusel, Catherine
TITLE OF INVENTION: Complementary DNA's Encoding Proteins with Signal Peptides
FILE REFERENCE: 56.US4.CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                   1006 CCCCACACAGAGGCCTTGCTGGTGCTGTGCTTCGATCGTGGAGAATACCTGCATCATA 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1185
                                                                                                                                                                                                                                                                                               GAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAGCTTCCTGCAGCTG 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     949 CCCCACATGGAGACCCTGATGGTGTTTTCCATTATGGAGAATACCTGCACCATG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1009 ACTCCCACAGCCAAGGCCTGGAGCTACATGGAGGAGGAGAGATCCTTGGCTTCGGGGATTCG 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1186 TTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCC 1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1246 CACAAGACTCCCTTTGTCAGCCCCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAG 1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTAGGGTCCCCAGAATCAGGCCCCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATG 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACA 1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAAC 1545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGGCAAAAGTGAGGACGTTGTGCTTGGAGGCCAGGAGTTCAGCACCTTGACTCTA 1665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGCTAAGAGCGAAGAGGTGATCCTTCGATGAGCCAAGAGTTTAGCACTTTGGCTATA 1608
                                                                                                                                                                 945
                                                                                                                                                                                                                                                                                                                                                                            948
                                                   894
                                                                                                                                                                                                                                                                                                                                                             895 GAACTGTATGATGA-----CTCCTGGAGAAGCCAAAGCACTGGCAGCCTCCAGCAGCTG
                                                                                                                                                      886 ATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCAGGAAATAGAAGAAATGAAT
                                                                                                                                                                                                          TCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1066 ACCCCCACAGCCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTICTGGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCAAAGCTGAGTTCCTTAGCTTCCAGGAGGGGATTTCCCCCACCAAGATTTGTGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1429 AACTATATCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGCCTGCTGAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCTGTGACAGCCTTGGCGGCGACAACATGTCTACCTGTGCCCCTCTGTGACTTCTGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1489 CAGAACAGAAGATGTCCCGCATGAGGTGTATGCTGAATGAGAGGTACAACGTGCTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCAGTTCGGATGA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
US-09-978-360A-262
                                                                                                                                                                                                                                                                                                  946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1606
```

g ò g

ò

셤 ઠે g

ò

a

ò

ઠે

4

Gaps

89 61 149

209

```
8991
                                                              9111
                                                                                                                                                                                                                                        GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCTGGCAGCTTCCTGCA 1001
                                                                                                                                                                                                                                                        9232 GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCTGGCAGGTATAGGAA 9291
         701
                                                        761
                                                                                                      821
                                                                                                                                                     881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      761
               GCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAA
                                                                                            762 TAAGGAGGACGGAGGCTGTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTC
                                                                                                            822 IGAAICICTATCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAGTAGAGTCTAC
                                                                                                                                                          9112 TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTCTAC
                                                                                                                                                                                                           TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATACATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522 AGTGACAGAACGCCAGACCTTCCAGCCCTGGGCTGAGAGGCTCAGGAACAACAACGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAAGCACAAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 471.8; DB 17; Length 29346; Pred. No. 1.1e-131; 0; Mismatches 7; Indels 0; C
                                                                                                                                                                                                                                                                                                                                             RESULT 14

US-10-088-117-52

Sequence 52, Application US/10085117

Publication No. US2030232334A1

GENERAL INFORMATION:

APPLICANT: MOTHER, David W.

TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER

TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR CANCER

CURRENT APPLICATION NUMBER: US/10/085,117

CURRENT FILING DATE: 2002-02-27

PRIOR FILING DATE: 2001-03-02

NUMBER OF SEQ ID NOS: 361

SEQ ID NO 52

LENGTH: 29346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: variation

! LOCATION: (1) ... (29346)

! OTHER INFORMATION: n = any nucleotide

US-10-085-117-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
24.9%;
Best Local Similarity 98.6%;
Matches 476; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                        GCT 1004
                                                                                                                                                                                                                                                                                                              9292 GTT 9294
                                               702
                                                                                                                                                                                                                                         942
                                                                                                                                                                                                                                                                                       1002
                                                                                                                                                                                           882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  642
               g
                                          ò
                                                            6 ይ
                                                                                                              g
                                                                                                                                                              셤
                                                                                                                                         ò
                                                                                                                                                                                         ò
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6794, Application US/10719993
Sequence 6794, Application US/10719993
Publication No. US20040265849A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVENTION: ALZHEIMER'S DISEASE, METHODS OF DETECTION AND USES THEREOF
CURRENT APPLICATION WHORE: 1051-11-24
NUMBER OF SEQ ID NOS: 55342
SOFTWARER: FastSEQ for Windows Version 4.0
SEQ ID NO 6794
LENGTH: 21347
          449
                                421
                                                       508
                                                                              481
                                                                                           CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAGGCTCAGCA 568
                                                                                                                                          688
                                                                                                                                                           AAGAGGGCCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGGGAAAAGCAGGAAG 748
                                                                                                                                                                                                                                                                                                 808
                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                     809 CCAAGITICACTCTGAATCTCTAATCTTTAACCCTTCCTTTTTGCTCCCGGGTACGAG 868
                                                                                                                                                                                                                                                                                                                                                   869 AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8871
                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
              AGCACAAAGCAAGAAGAAGTGGAGCACAGAGGAGGAGACACAAAAAAAGAGAGG
                                                                                                                                                                                                                                                      749 AAGGACAGGGGACTAAGGAAGGGACGGGAGGCTGTGTCTCAGCTGCAGACAAAAAAGA
                                                                                                                                                                                                                                                                                                      AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      522 AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     582 GCTCCTACAATCCTTCTTGTCCCTGGGAGGCCAAGGAAGCGAAAGCAAAGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATAGATGAAATGAAATATATATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 24.9%; Score 471.8; DB 18; Length 21347; Best Local Similarity 98.6%; Pred. No. 9.3e-132; Matches 476; Conservative 0; Mismatches 7; Indels 0; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
US-10-719-993-6794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
US-10-719-993-6794
                                              450
                                                                                            509
                                                                                                                   482
                                                                                                                                                                                          629
                                                                                                                                                                                                                 602
                                                                                                                                                                                                                                        689
                                                                                                                                                                                                                                                                                                                                                                                                            842
                                                                                                                                                                                                                                                                                                                                                                                                                                    929
                                           ò
                                                                ద
                                                                                                              В
                                                                                        8
                                                                                                                                        ò
                                                                                                                                                            ద
                                                                                                                                                                                       ઠે
                                                                                                                                                                                                           임
                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ઠ

δ

```
a
                                                                                 ઠે
                 ò
                                                                                                                                                                                                                     13112 TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAGTAGAGTCTAC 13171
                                                                                                                                                    942 GAATGAAATATATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAGCTTCCTGCA 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTACATGGAGGAGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGG 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACACGCCAAGGCCTGG 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGAGGCCAGCCTGCAGCGGCAAATGCGACACCTCCCACAAGACTCCCTTTGTCAGC 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71 TACTGGAGAAACCAAAACCCTGGAGCCTCCTGCAGCCCCCCACACAGAGGCCTTGCTG 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131 GIGCIGIGCIATICGAICGIGGAGAATACCIGCAICATAACCCCCACAGGCCAAGGCCIGG 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251 CGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                              882 TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAAATAGATGAAAT
TAAGGAGGACGCAGCTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 GAGTICCNTAGCNCAGNGNGGNGGANTCTGAAATGAATGAAATATATGATGAGAACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGACACATGTCTTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 22.9%; Score 433.8; DB 10; Length 469; Best Local Similarity 96.1%; Pred. No. 6e-121; Matches 441; Conservative 0; Mismatches 18; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14842, Application US/09918995
Publication No. US20030073623A1
GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REFERENCE: 2041.-756
CURRENT APPLICATION NUMBER: US/09/918,995
CURRENT FILID DATE: 1999-01-20
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR PRIOR DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: PSSECS for Windows Version 3.0
SEQ ID NO 14842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:

NAME/KEY: misc feature
LOCATION: (1)...(469)

OTHER INFORMATION: n = A,T,C or G
US-09-918-995-14842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                    13292 GTT 13294
                                                                                                                                                                                                                                                                    1002 GCT 1004
                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-09-918-995-14842
                                                               822
762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1207
                      ద
                                                           8 6
                                                                                                                      ઠે
                                                                                                                                                         ò
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
```

```
Db 311 TCAGAGGCCAGCCTGCAGCGACAATGCGACCCCCCACAAGACTCCCTTTGTCAGC 370

Qy 1267 CCCTTGCTTGCCTCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGC 1326

Db 371 CCCTTGCTTGCTTGCTTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGC 430

Qy 1327 CGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCCACATG 469

Bb 431 CGCTTTTACGGGTTGGTTTGTACGGTGGGGTCCCACATG 469

Search completed: March 7, 2005, 22:56:52

Search completed: March 7, 2005, 22:56:52
```

THIS PAGE BLANK USPTO)

ĕ

Result Š

Ţ
W
н
•
O
ы
٠ <del>۲</del> ΄
7
ユ
О
•
m
~
Ť
á
_
w.
ᅼ
0
σ
ß
īi.
'
÷
ð
0
1
цB
3
_

AA473853 vg92h10.r BE985880 UI_M-CG0p BM938496 UI_M-CG0p BM938496 UI_M-CG0p BM938496 UI_M-CG0p AV260707 CD768969 AGENCOURT AQ765048 AGENCOURT BB541139 BB541139 CA464242 AGENCOURT BB541139 BB541139 CA464241 AGENCOURT BU933807 AGENCOURT AR053586 Mus muscu BR56118770 BAS16397 BU56152 AGENCOURT BU933808 AGENCOURT AR053586 Mus muscu BR5658 Ba24606.r AA676691 AGENCOURT AA676691 AGENCOURT AA7337449 INOC66E11.x AI743812 WG42C07.x BM65818 AGENCOURT AA537449 INOC66E11.x AI743812 WG42C07.x BM650581 AGENCOURT BU32792 G03496594 BU32792 G03496594 BU32792 G03496594 BU32792 G03496594 BU32792 G03496594 BU32792 G03496694 BU470352 G03496694 BU470352 G03496694 BU470352 G03496694 BU470352 G03496694 BU470352 G03496964 CC153090 AGENCOURT AG59399 BR18 muscu CG679260 PRIDISC	BU1192B1 603143445 BU255919 603412833 BX778495 BX778495 BX354463 BX354463 AL562053 AL562053 BU298009 603608875 BU1291651 603445601 BX366536 BX16509 603005579 BX453868 BX453868
1 AA473853 2 BE98E980 5 BM943116 6 CD768969 6 CD768969 6 CD768969 6 CD768969 7 CC739036 5 BW770017 7 CF739036 5 BW371037 7 CF739036 5 BW371037 6 CD60682 7 CF739036 7 CF739036 7 CF739036 8 BW770017 8 BW770017 9 CL60682 1 AA610536 1 AA61053 1 AA61053 1 AA610562 2 BE223089 8 AZ337449 1 AA610397 1 AA61052 2 BE223089 1 AA610562 2 BW267049 1 AA7333749 6 BW337482 8 BW267049 1 AU733884 5 BW371677 5 BW371677 5 BW371677 6 CM373884 5 BW371677 7 CC004709	BU1155919 BX778495 BX778495 BX784463 AL562053 BU298009 BU121851 BX366536 BX105699 BX453868
0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	:
	22122222222222222222222222222222222222
0 0 000000 000000 0 0000000 0 00000000	)
BG197880 RST17128 AI13894 qG99G06.x R074731 UT-R-GO-U B1831543 60307469 AI138894 qG99G06.x R07740 ye98f96.x R077446 603075139 AA465432 a103110.r B1830744 603075139 AA465435 CM0-FN004 BX515014 BX515014 AA154150 Mq49b02.r AI326707 Mq49b02.r AI3366 CR473065 BM533867 hb10a07.g CC6911133 AMGNNUC:S CC695701 DG8-112G2.x AQ02439 HS 2182 A CC601955 DG8-13262 CC601955 DG8-13262 CC601955 DG8-13262 CC601955 DG8-13262 CC601955 DG8-13262 CC601955 DG8-1304 CC604503 DG8-13262 CC604503 DG8-1304 CC604503 DG8-1304 CC604503 DG8-1304 CC604503 DG8-1304 CC604503 DG8-1304 CC604503 DG8-28412 BR511104 U1-R-BJ1- BR51202 BR54350 BB54350 BB5435	BF149695 uy67h11.y BM2B8266 529244 WA CR262336 Reverse s AV05781 AV005781 AL55326 Vay3b02.x CR138551 Reverse s AZ25213 RPCI-23-4 CE671990 tigr-gss- CR57497 B0649B01-
6.7 245 4 BG197880 6.0 73 1 AIS74731 5.0 761 4 BI831543 4.0 655 4 BI832428 3.7 651 4 BI832428 3.8 7 651 4 BI832428 3.9 655 4 BI832428 3.9 655 4 BI832428 3.0 1179 4 BI837945 2.4 627 1 AAIS4158 2.4 627 1 AAIS4158 2.1 310 5 BA32231 2.1 310 5 BA32231 2.1 445 2 BE33231 2.1 533 1 AAIS4158 445 2 BE33231 2.1 6 623 7 CK743065 1.6 623 7 CK759800 1.7 70 7 CK59800 1.4 770 7 CK59800 1.4 770 7 CK59800 1.4 770 7 CK59800 1.5 582 8 BY66118 1.3 369 8 AZ846675 1.2 677 7 CK596043 1.2 644 2 BE111104 1.2 654 2 BE111104 1.3 369 8 AX846675 1.2 657 7 CK696683 1.3 369 8 AX846675 1.2 656 2 BE564450 1.2 265 2 BE574657 1.2 265 2 BE574658 1.3 369 8 AX846675 1.3 360 8 AX846675 1.3	5 4 4 5 2 2 4 4 5 3 4 4 4 5 3 4 4 4 5 3 4 4 4 5 4 4 4 4
1111 111100000000000000000000000000000	222222222222222222222222222222222222222
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	162 163 164 165 0 165 0 167 0 169 0 169

不言不 問稿 後衛衛門 學一件

98732 Rice UI-M-AH0-98AS1781 TC3-51L6. TC3-51L6. S5 176a B v112b10.r 2M0146F13 AA270689 VACANGE BM106701 510637 MA AV642243 V1242047 AA672243 V1242047 AA672243 V1242047 AA672261 UIN-AH0-BEC52261 UIN-AH0-CV11178 BG14 LT51 CA395411 CS64b07 Y BB5191 CIT-HSP-216 AY12738 O AY127380 CL35340 RPC144 40 CL355340 RPC144 40 CL355340 RPC144 WB821344 BMS02825 i144f03.x CR757267 CR75779 CR757782 UI-R-CA1-BY570154 59-E9623 C98732 BB740843 BY69269 BY69269 BY283318 BY283318 AA16253 AA16253 AA16253 CC016767 CC016767 CC052245 CL952245 BY548394 BY548394 BY548394 BY548394 BY548394 BN532172 BB7785776 BB7785776 AG198077 AV791304 CR757049 CR757052 CR757779 C AI840282 BE228381 AV562174 B1420550 B1420550 AV533224 BQ552867 B1593579 CR471060 BH239579 CR13989 AW584045 AW584096 AW5840 AW58 us-09-559-013e-23.oligo.rst

AV009586 AV009586 BH226730 1006134C0 T01789 we82702510 E AV177811 AV177811 BAV182101 AV182101 BAJ1844 MEP-AY1- AA106433 MIS-0-7. T CL449342 CMHD-GT_1 CE2449342 CMHD-GT_1 CE2449342 CMHD-GT_1 CE2449342 CMHD-GT_1 CE2449342 CMHD-GT_1 CE2449342 CMHD-GT_1 CE2446602 EBST_1000000000000000000000000000000000000	CF09936 AMGNNUC:S CF799364 86635 MA CF06511 Lig1-gas- AA966069 Vifenal.r B199088 j1907f6.r B5234709 dab63a11. B234709 dab63a11. B220434 ug5160.x CC190743 EK049454. BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093014 RC-CMO14 BF093013 UI-M-CED- BF0526928 NXPV 0667 BG625790 NXPV 0667
1 AV009586 8 BH226730 1 AV17811 1 AV1811 1 AV1811 1 AV1811 1 AV182101 1 AV182101 1 AV182101 1 AV182101 1 AV182101 1 AV182101 1 AL046395 9 CE24476 1 AL046395 1 AL046395 2 BE47761 2 BE47761 2 BE47761 2 BE555950 2 BE64776 1 AV201267 4 B1320947 7 R32670 2 BE64776 1 AV201267 1 AV201267 1 AV189263 1 AL52225 2 BE72225 2 BE857129 1 AV189263 1 AL569595 1 AL569595 1 AV189263 1 BH365804 1 BH363804 1 BH365804 1 BH365804 1 BH365804 1 BH365804 1 BH365804 1 BY6038011	18801904 1876111 1876111 1876111 1876609 1876609 1876609 18769116 18769116 1870409 1870409 1870409 1870413 1870413 1870413 1870413 1870613 187
0.000000000000000000000000000000000000	4412 4414444444444444444444444444444444
	ਰਰਰਰਰਰਰ ਜਜ਼ਜ਼ਜ਼ੀ ਜੋ ਜੋ ਜੋ ਜੋ ਜੋ
00 00 00 00 0 0 0 0 0 0 0 0 0 0 0 0 0	518 529 521 521 524 524 525 526 527 528 530 533 533 533
BI617619 RH48011.5 BU207876 604156159 CE207792 Ligr-gss-BB226025 BB132780 BB132780 AV783144 AV783144 BY724479 BY724479 AI790218 UK57403.x BJ008214 AU089214 CN524891 UI-M-GH0-BW949032 UI-M-EM0-CC482231 CH242_15E CD804397 UI-M-RA0-AI780 UI-M-RA0-AI7808398 UK56509.x AI547206 PN3.1_02_CC482231 CH240_310 CU774482 UI-M-RA0-AI780 UI-M-GH0-BW260507 6015640-AI78098-X AI547206 PN3.1_02_CC482231 CH240_310 CU774482 UI-M-RA0-AI780-AI7809-X AI547206 PN3.1_02_CC482231 CH240_310 CU774482 UI-M-GH0-BW260507 6015640-AI7809-X CU722861 G079891TF BQ552868 H40.18F1I-BY761465 BV761465 BV761465 BU322861 G07998-AI790-A	AG163602 Pan trog1 BX881290 Arabidops AK007700 Mus muscu BG848215 1024020H0 AK048151 Mus muscu CR385902 OSTR03689 AQ062319 CTT-HSP-2 C13176 C13176 Yuji CR347573 tigt-Gse- CK581839 IST W15_3 AW302285 XY92A06 XX CR3465021 OSTR03689 BB590107 CE848103 tigt-Gse- CC990384 ZWMBBb052
20 1.1 624 4 B1617619 20 1.1 626 5 B1207792 20 1.1 628 6 B12260752 20 1.1 630 2 B12260792 20 1.1 630 6 B172407 20 1.1 630 6 B172407 20 1.1 652 7 CN5249914 20 1.1 652 7 CN5249914 20 1.1 670 6 CD94231 20 1.1 704 7 B126231 20 1.1 704 7 B126231 20 1.1 704 7 B126231 20 1.1 704 8 B1726476 20 1.1 704 8 B17267102 20 1.1 704 8 B17266231 20 1.1 704 9 CB581875 20 1.1 704 7 CF52249 20 1.1 705 8 B1726518 20 1.1 707 8 B1726518 20 1.1 708 9 CB58187 20 1.1 708 9 CB58187 20 1.1 709 6 B1744376 20 1.1 709 7 CF52249 20 1.1 709 8 B1744376 20 1.1 709 8 B1744376 20 1.1 709 8 B1744376 20 1.1 700 7 CF52269 20 1.1 700 8 B1744376 20 1.1 700 7 CF52269 20 1.1 700 8 B1744376 20 1.1 800 7 CF518026 20 1.1 800 7 CF518026 20 1.1 995 8 A212285 20 1.1 995 8 B2112285 20 1.1 995 8 B2112285 20 1.1 100 9 CC201709	1.1 1362 9 1.1 1363 9 1.1 1030 4 1.1 2030 4 1.1 2030 4 1.0 2744 3 1.0 229 8 1.0 240 6 1.0 240 6 1.0 240 7 1.0 250 2 1.0 250 2 1.0 250 2 1.0 259 2 1.0 259 2
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	)

2005
5:59:40
9
Wed Mar

us-09-559-013e-23.oligo.rst

B6317960 NXPV 007 AA530375 vj48C05.r BX515394 BX515394 BG639831 SD07205.3 A1455519 LD24677.3	AQ471138 CITEL-E1- AQ700627 HS 5379 A CR109245 FOrward B	AZ983482 ZM0264108 BI331414 602981711 RH274165 CH230-35C	BQ490376 92-E9437- BI122426 I006P61P	BU696780 LL2in1313 AI511712 LD43204.5	CK904083 ie72e06.x CF793841 889290 MA	BP206022 BP206022 BP313328 BP313328	CG986652 CH240 157 CL337635 RPCI44 26	AI315057 uj28h06.x AU213220 AU213220	BI165134 RE04956.5	BE444330 WHE1117 H	BI374587 RE62221.5 CC417598 PUHOA68TD	AV668373 AV668373	AA392719 LD11833.5	CE374645 tigr-gss- AA950740 LD30848.5	AA392383 LD11236.5 CE378818 tigr-gss-	CO473667 GQ00410.B CB307844 HFIG829 H	AZ382187 1M0139D07 CR369651 CR369651	B94389 CIT-HSP-217 CK528231 rswfa0_00	CK998658 1D34C11.D BJ498602 BJ498602	CO242975 WS0032.B2	AZ166858 SP 0094 A CE502502 tigr-gss-	BJ104712 BJ104712 CK529240 rswfa0_00	CV031738 RTNACL1 3 R2944337 CH240 83C	AZ210619 SP 0154 A	CC483275 CH240_312	AJ735373 AJ735373 CG453622 OGTCA76TV	BG524191 39-89 Ste	AG045902 Pan trogl	CG067448 PUICO68TD	AZ166781 SP 0094 A	CE172594 tigr-gss- BB607654 BB607654	AIS11849 LD43388.5	BQ780302 UI-R-FF0-	AZ210120 SP_0155_A BX991288 Forward_s	BI214360 RE20138.5 AZ203691 SP 0084 A
555 1 AA530375 555 1 AA530375 556 5 BXX15394 557 4 BGG39831 558 1 AA455519	œ ω <b>0</b> /4	. 00 44 00	o €	5 1	~	ហហ	თ თ		40	י וט ע	4 œ	п ч	р гі (	<b>у</b> Ч	H 6	6 7	8 7	9 7	C 4 1	۰ ۲	დ თ	4 1	۲ a	00 1	· თ ·	٦ م	4 1	ით	۰ و	1000	σ α	- T	# LD 0	<b>в</b> 0	4 B
, o o o o o	 	بنبن		99	9 9	99			.1.		. i.	9		 		 				. i.	۰. د. د.	0 0	9 6								 				6 6 
C 6110 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1888	621 1	623 624 1	·	627 1 628 1			633						·				652 652 1					661 1	17		666	4 ~		671 1	-	674 1			<b>н</b> н
AA031995 MIS.//MOS.I BGG39896 NXSI 105 CO191078 EKO50644. AA221606 MV50802.r BE991181 NXCI 117	718 7	30 1	63	192	23	32 1	53	50	58	18	64	54	589	64	16	53 1	18 7	986	23	20 7	68 F	10 40 10 10 10 10 10 10 10 10 10 10 10 10 10	37 r	1 200	6	22	66 t	20	24 E	100	329	42 E	110	63	82 7 91 E
AAVOS129 BG039896 CO191078 AA221606 BE997181	A1313118 AA599011 BQ696718 AT174037	BM764395 A1681144 CO303130															ο 4	7 7 7	» ~ ,	<b>⊣</b> 4•	œ v	4 O	4 4	4 -	1 - 0	ο σ	σα	· ·							
4770																																			
	.0 449 .0 449 .0 449	.0 452 .0 454 .0 454	.0 456	.0 458	.0 461	o o	o. o.	°.	0.0		. 0.	0.0	. • •	. 0, 0	. 0.	. 0.	. o.	0.0.		. 0.	. o.	0.0.	0.0	0.0			۰.	. 0.	0.0		. o.	0.0		00	0.0

_
- 27
- 7
r.
0
8
olio
Н
0
-
~
23
N
- 1
0
ň
H
Ö
7
O,
Ŋ
Ŋ
o,
ö
_
•
'n.
3
_

AZ210612 SP 0154 A  PSP4736 AGENCOURT BJ811121 BJ81121 AG454778 Mus muscu AZ186443 SP 1033 B AZ186443 SP 1034 B BG5203 CIT-HSP-201 AZ171792 SP 7023 B BG703399 602 602605 BU798168 CW8Z3937 Oa_81bn AQ948245 Sheared D AZ133130 SP 0159 B BG2297613 602231372 CW8Z3937 Oa_81bn AQ948245 Sheared D AZ131312 SP 01039 B CW5Z3440 IN SERNCOURT CW15285 AGENCOURT CW16261 AGENCOURT CW16261 AGENCOURT CW16161 AGENCOURT CW16161 AGENCOURT CCF96064 AGENCOURT CCF96062 AGENCOURT CCF96064 AGENCOURT CCF96062 AGENCOURT CCF96063 AGENCOURT CCF96063 AGENCOURT CCF96064 AGENCOURT CCF96064 AGENCOURT CCF96064 AGENCOURT CCF96064 AGENCOURT CCF96065 AGENCOURT CCF96066 AGENCOUR	
11 8 AZZ10612 13 4 BU8117316 14 8 BAZ187494 15 8 AZ187494 16 8 AZ187494 17 8 AZ187494 18 8 AZ187494 19 9 CG27671 10 9 CG27671 10 9 CG27671 11 6 AZ18129 12 7 CR023337 13 8 AZ211392 14 8 BG703199 15 6 CG27621 16 9 CG27621 17 9 CG27621 18 AZ18749 19 1 AZ18769 10 1 AZ18769 10 1 AZ18769 10 1 AZ18769 11 1 AZ18769 12 CG54401 13 AZ18769 14 BG703185 15 CG54681 16 CG54681 17 CC612611 18 AZ18769 19 1 AZ18769 10 CG54401 10 CG54401 11 AZ187713 12 CG54401 13 AZ187713 14 BIZ17269 15 CG54401 16 CG54401 17 CG54061 18 AZ187713 18 AZ187713 19 CG54401 10 CG54401 10 CG54401 11 AZ1377269 11 AZ1377269 12 CG54714 13 AZ1377269 14 BIZ17049 15 CG64714 16 CG54714 17 CG625378 18 BZ17769 18 BZ17769 19 CG64714 10 CG54714 10 CG54714 11 AZ1377269 12 CG64714 13 CG64714 14 BZ17769 15 CG64714 16 CG557085 17 CG64714 18 BZ17769 18 CG6877131 18	
1331 1331 1331 1331 1331 1331 1331 133	
D D D D D D D D D D D D D D D D D D D	
BR667702 BR667702 BR667702 BR667702 BR667138 CR251297 Reverse AG0309813 Pan troog I CK105472 UAJSCRA09 CK105472 UAJSCRA09 AZ518817 RPCI-11-3 BG700166 BC0267633 AZ648401 UMOS17H24 CK254150 UT-M-H0-B137535 CK234836 CG1B183TH AZ763989 UMCS59007 AZ513076 LD45305.5 BR609835 BR009835 BR0	
19   1.0   649   5   BR567702   19   1.0   649   5   BR567702   19   1.0   650   9   AGG351297   19   1.0   650   9   AGG351297   19   1.0   655   8   AGG39111   19   1.0   655   8   AGG3911   19   1.0   655   8   AGG3911   19   1.0   665   8   AGG30619   19   1.0   665   8   AGG30619   19   1.0   667   9   CC224836   19   1.0   667   9   CC224836   19   1.0   667   9   CC224836   10   667   9   CC224936   10   667   9   CC2242648   10   667   9   CC224266   10   9   CC224266	
6883 6883 6884 6885 6886 6887 6887 6887 6887 6887 6887	•

	2005
	:40 2
	15:59:
	ò
	Mar
•	Wed

us-09-559-013e-23.oligo.rst

BG500928 602546508 CL502732 SALL-715 AL191886 Tetraodon AZ211627 SP 0156 B AL105317 Droseophil AZ20650 SP 0105 B AZ139615 SP-0105 B CK029803 AGENCOURT CC276896 CH261-134	AZ211616 SP_0156_B AZ211615 SP_0156_B BX361585 BX361585 BM922148 AGENCOURT AZ211624 SP_0156_B	CK212240 FGASO2410 BQ071745 AGENCOURT BX338081 BX338081 CL648771 CH213-194 CF935571 TrEST-B04 BU194095 AGENCOURT AK017045 MUS MUS MUSCU	CK622066 full-leng BX161483 human ful AL136873 Homo sapi AK002562 Mus muscu CK606273 full-leng AK053949 Mus muscu AX406623 Homo sapi AK078263 Mus muscu	AK081518 Mus muscu AK082465 Mus muscu BC008491 Homo sapi AK048316 Mus muscu CL978230 OSIFCC031 BC035641 Homo sapi AL832254 Homo sapi	AW59037 C03012.X AW59037 C0411.X BF706776 284410 MA AQ353514 C1TB1-E1- BF36568 QV2-NT004 CA778916 MPL384 11 AI611367 t667608.X AI611367 t666013.X AI611522 t666013.X AI611522 t666013.X	AZ26333 RECT-Z3-1 AZ26333 RECT-Z3-1 CE763176 Ligr-gss- CL893820 abg32.005. CE805914 tigr-gss- AW811716 ILZ-287016 BJZ70093 BJZ70093 AV227322 AV227322 CC692899 OGLCKI4TH BQ34393 RZ-NT005 BF817259 PMZ-CI015	CO257220 WS00817.B AA742524 Nx29910.8 BP685773 BP685773 BP685773 BP685773 BP950811 BP950811 AA764963 Nx777b09.8 BX947052 Arabidops BK947052 Arabidops BK947424 ILS-NT027 BI055579 WA-GN040 CV198143 CGF100396 AA495039 £405612.8 D79550 HWA74G10B BF771176 RC2-IT004 BP010047 BP010047
11 19 1.0 986 4 19 1.0 990 9 19 1.0 992 8 19 1.0 992 8 19 1.0 100 8 19 1.0 1013 8 19 1.0 1018 8 19 1.0 1018 8	910 19 1.0 1024 8 911 19 1.0 1025 8 912 19 1.0 1030 5 913 19 1.0 1039 8 914 19 1.0 1059 8	915 19 1.0 1061 7 916 19 1.0 1091 5 917 19 1.0 1135 9 919 19 1.0 1335 7 920 19 1.0 1361 3 921 19 1.0 1361 3	922 19 1.0 1597 3 923 19 1.0 1632 3 924 19 1.0 1842 3 925 19 1.0 1927 3 926 19 1.0 2090 3 927 19 1.0 2212 3 928 19 1.0 2512 3	19 1.0 3201 3 19 1.0 323 3 19 1.0 3633 3 19 1.0 3633 3 19 1.0 4358 3 19 1.0 4593 3 19 1.0 4593 3	939 18 0.9 107 2 940 18 0.9 118 8 942 18 0.9 119 6 943 18 0.9 119 6 944 18 0.9 120 1 945 18 0.9 126 1 947 18 0.9 126 1 947 18 0.9 126 2 948 18 0.9 126 1 947 18 0.9 126 2 948 18 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948 18 0.9 126 2 948	949 18 0.9 133 9 953 18 0.9 135 1 954 955 18 0.9 154 9 955 18 0.9 162 9 955 18 0.9 166 2 955 18 0.9 166 2 955 18 0.9 167 1 955 18 0.9 180 9 958 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2 959 18 0.9 180 9 959 2	C 960 18 0.9 197 7 CO222720 962 18 0.9 201 1 AA742524 963 18 0.9 211 5 BP689733 C 964 18 0.9 212 2 AW875211 C 965 18 0.9 213 5 BP950811 C 965 18 0.9 216 9 BX947052 C 967 18 0.9 220 2 BP34424 C 969 18 0.9 220 4 BI050579 C 970 18 0.9 223 7 CV198143 C 970 18 0.9 223 7 CV198143 C 972 18 0.9 241 2 BF771176 973 18 0.9 241 2 BF771176
CR813084 GROAAA37C CK095581 UA15CPA09 BU143544 603229692 CV121429 AGENCOURT BM360519 GA_Ea003 AZ196228 SP_1032_A CK202020 FGAS01054 CK201670 FGAS01019 BZ165893 GR320-463	CB181606 AGENCOURT CG264863 OGMEN18TH BF784653 602110376 BZ678071 PUBH101TD CR213469 Reverse 8	B1732426 603355184 CK110608 N068G12 P AZ205016 SP 0099 A CO121415 GR Eb02J AZ136892 SP 0173 A BG430953 602500253 CG315997 OGXBE64TH	AZ207726 SP 0134 A BX200726 SP 0134 A CR054415 REVERSE B AZ208300 SP 0137 B BG843504 1024003Ã0 B1218440 602937932 AZ211622 SP 0156 B BH157783 ENTRUS®TR	AZ206420 SP 0108 A CC366266 PUHPF68TB CA488016 AGENCOURT BX371383 BX371383 BX370137 BX390137 AZ130664 SP 0158 A CG144596 PUFWZ35TB BG281142 GC2401642	AZ139588 SP 0158 A B1247099 602960664 B332219 602433550 CC7222737 CCIANZ3TV AZ139568 SP 0179 B AZ20390 SP 0057 B AZ202390 SP 0057 B AZ211666 SP 0158 B CR24445 FOTWART 6	BZ973612 PUDFA07TD CA474074 AGENCOURT BQ928027 AGENCOURT B18712939 603396706 CD251316 AGENCOURT AZ15778 SP 0058 A CC294473 CH261-130 BG295657 602393063 BG212433 AGENCOURT AZ203165 SP 0080 B B1145320 602910458	CD515661 AGENCOURT AG511905 Mus muscu BQ944403 AGENCOURT AZ136379 SP 0170 B BF233129 60181692 B1739768 603362268 CB997671 AGENCOURT BQ686531 AGENCOURT AZ137595 SP 0174 B CG225386 OGZAK64TV BF301164 602029189 CG316009 OGCREE64TV AZ206232 SP 0105_B BE740861 601593087
0.0 819 9 0.0 823 7 0.0 832 7 0.0 835 4 0.0 835 8 0.0 840 7 0.0 844 8	.0 845 6 .0 847 2 .0 848 8 .0 848 8	.0 853 4 .0 858 8 .0 860 7 .0 862 8 .0 863 4	0 871 8 0 872 5 0 874 9 0 877 4 0 877 8 0 877 8	0.000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000000000000000000000000000000000000	1.0 943 6 CD515661 1.0 943 9 AG511905 1.0 948 8 AZ136779 1.0 951 2 BF233129 1.0 952 4 BT739768 1.0 963 5 BQ688531 1.0 965 8 AZ137595 1.0 965 9 CG225386 1.0 967 2 BF301164 1.0 967 2 BF301164 1.0 967 9 CG316099 1.0 970 8 AZ206232 1.0 973 2 BE740861
3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	833 833 840 840	4444322 4444332 4476 1111111111111111111111111111111111	555	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	666 666 677 773 773 773 774 774 774 774 774 774 7	24746 8883 8883 8654 8674 8674 8674 8674 8674 8674 8674 867	887 888 6888 890 890 6891 6893 6893 894 895 896 19 896 19 896 19 896 19 897 19

0.9-3 kb. Library is normalized and enrich full-length clones and was constructed by (Invitrogen). Research Genetics tracking this is a NIH_MGC Library."	Matches 816; Conservative 0;	Db 21 CGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCACGGCTGGCT	QY         82         CTCCTGAAGGTGCTGCTCTGCCTCTGGCACCTGCCGAGGATTCGACTCAGGCC 141           Db         81         CTCCTGAAGGTGCTCCTGCCTCTGGCACTGCCCGAAGATTCGAAGATTCGAAGATTCCAAGAATTCC		QY         202 CCAACCTGGAAGCCAGAGACTACCTGCCGTCTCCGTGCAAGCCAGGGTGCCGGAATCCC         261           Db         201 CCAACCTGGAAGCCAAGCCAAGGCGAAACCCAAGGCTGCCGAAATCCC         260		9y 322 TCCAACCTCCCTTAIGCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTGCTTGC 381	9y 382 TCCAACCACTCTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAG	QY         442 CCTAACACTCTCAAGAGATAGAAGCTTCAGCTGAAGTCTCACCCACC	2 (2 (2	QY         562         CICAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGCCAGGACCAA         621           Db         561         CTCAGCAACAAGAGCTCCTACAATCCTTCCTTGTCCTGGGAGCCAGGAAAAAAAA		() ('			RESULT 2 BM553910 LOCUS LOCUS DEFINITION AGENCOURT_6546785 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5742226 ACCESSION BM553910
974 18 0.9 247 1 AV324605 GG863206 GG863207 GG867 G	18 0.9 262 2 AW872590 AW872590 18 0.9 262 7 CK767555 CK767555 18 0.9 263 1 AA632496 AA632496 AA632496	985 18 0.9 263 7 CO229696 CO229696 986 18 0.9 264 1 AA886677 AA888677 987 18 0.9 264 2 BB672130 BB672130 988 18 0 9 264 2 CO229696	18 0.9 266 CB490595 CB4865950 CB4865950 18 0.9 266 I AL642061 AL642961 AL642961 18 0.9 267 5 BP951301 RPS61301	992 18 0.9 269 2 BF375343 993 18 0.9 269 7 CO320178 994 18 0.9 270 1 AA676301 995 18 0.9 271 2 BE938535	18 0.9 273 1 AA668196 AA668155 18 0.9 277 2 B8224310 B8324310 18 0.9 277 9 AG266519 AG266519 18 0.9 278 2 BB007799 BB007799	CR217106 CR217106 CR217106 CR217106 ALIGNMENTS	RESULT 1 BM564020 LOCUS	DEFINITION AGENCOURT 6560257 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5742040 ACCESSION BRAS64020 VERSION HASFA020 1 CT.1001167	SH	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; REFERENCE 1 (bases 1 to 1076) AUTHORS NIH-MGC http://mgc.nci.nih.gov/.	æ	Tissue Procurement: Life Technologies, Inc. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. COnsortium (LINL) DNA Sequencing by: Agencourt Bioscience Corporation	<pre>Loue distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAM12759 row: i column: 17</pre>	High quality sequence stop: 758.  FEATURES Location/Qualifiers  Source 1. :1076 /organism="Homo sapiens"	/mol_type="mana" /mol_type="mana" /do_xref==taxon:9606" /clone="manas:5742040" /lisue_type="medulla"	/dlone_lib="NHH MGC_119" //dlone_lib="NHH MGC_119" /note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range

604

```
Enkaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Enkaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

En 1 (bases 1 to 1093)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Lu Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov
Plate: LLAM12759 row: d column: 23

High quality sequence start: 11

High quality sequence start: 11

High quality sequence start: 11

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGENCOURT 6560348 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5741926
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="IMAGE:5741926"
/tissue type="medulla"
/lab_host="DH10B"
/lab_host="DH10B"
/clone lib="NH1 MCC 119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site 1: Not1;
Site 2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1:3 kb, insert size range 0:9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber
                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                              544
                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784
                                            484
                                                                                                          425 CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                     TTCCAGCCCTGGCCTGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                545 TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCCTACAATCCTCCCTTG
                                                                                                                                                                                                                                                     TCCCTGGGAGGCCAGGAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                               665 CAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAAACAGGAAGAGAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                             GAACAGGAAGAGGGAAAAGCAGGAAGAAGGACAGGGGACTAAGGAGGGACGGGAGGCT
                                                                                    TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. 1093
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         785 GTGTCTCAGCTGCAGACAGACTCAGA 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTCTCAGCTGCAGACAGACTCAGA 806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BM563837.1 GI:18811108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                      481
                                                                                                                                                                     541
                                                                                                                                                                                                                                                       601
    421
                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
BM563837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                     셤
                                                                           ò
                                                                                                                  셤
                                                                                                                                                                 Š
                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_txef="txexon:9606"
/clone="type="medulla"
/tissue_type="medulla"
/lab_host="hyllos"
/clone]lib="NIH MGC_119"
/clone]lib="NIH MGC_119"
/clone]lib="NIH MGC_119"
/clone]lib="NIH MGC_119"
/clone]lib="NIH MGC_119"
/clone]lib="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 ACCCACGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGCCTTA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCACGGCTGCCGGAATCCCACACTCGTCCAGGCTGGACCAATATGAAAACCACGGCTTA 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GIGCCCGAIGGIGCTGTCTGCTCCAACCTCCCTAATGCCTCCTGGTTTGAGTCTTTCTGC 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTICACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTICACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1026)
                                                                                                                                                                                                    Context: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM12760 row: a column: 11
High quality sequence stop: 713.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Grindadececericiererecedecedecedecedererrerecedecardadecea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTAGAGGCGCTTGTCCACGGGACGCGGGCGGATCTTCTCCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                      NIH-MGC http://mcc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4; Length 1026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 755; |
Pred. No. 0;
GI:18793058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39.8%;
99.9%;
                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 805; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
3M553910.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                       SOURCE
ORGANISM
                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

Wed

```
sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
        SOURCE
ORGANISM
                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
(Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                               TCACTCCTGAAGGTGCTGCTCCTGCCACCTGCCGCAGCCCAGGATTCGACTCAG 138
                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                             258
                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         318
                                                                                                                                                                                                                                                                                                            GCCCCCACTCCAGGCAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCACACTCGTCCAGGTGGACCATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTGT 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           678
                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCCCATCTCACCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAG 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    redecearcreacecracracacada de a a consecerción de actual                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCAGGAAGAAGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGCAGACA 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 TCACTCCTGAAGGTGCTGCTCCTGGCCTCTGGCACCTGCCGCAGGATTCGACTCAG
                                                                                                                                                                                GCCTCCACTCCAGGGGCGCCTCTCTCTACCGAATAGGAACGCTTCTTCGCACTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                          201 ACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCTCCAACCTCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCATACCGT
                                                                                                                                                                                                                                                                                                                                                                                       ACTCCAACCTGGAAGGCAGAGTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAAT
                                                                                                                                                      CCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGGATGGTGCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGGCAGGAGCCGACACAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACAAGCAGGAAGAGGGCAGAAACAGGAAGAAGAGAAGAGGAACAGGAAGAGAGGGA
                                                                                                                     Gaps
                                                                                                                     ö
                                                                               Length 1093;
                                                                                                                   1; Indels
                                                                               4;
                                                                             DB
                                                                           39.8%; Score 754; DB 99.9%; Pred. No. 0; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTCAGAGCCCAAGTTTCACTCTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity 99.9
804; Conservative
                                                                         Query Match
Best Local Si
Matches 804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              319
                                                                                                                                                    13
                                                                                                                                                                                          21
                                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                                                                                            139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
BM554354
LOCUS
                                    ORIGIN
                                                                                                                                                                                                                                                           g
                                                                                                                                                    ò
                                                                                                                                                                                          a
                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>ک</u> ۾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

AGENCOURT\_6546668 NIH\_MGC\_119 Homo sapiens cDNA clone IMAGE:5742482 5', mRNA sequence.
BMS54354
BMS54354.1 GI:18793882
EST.

DEFINITION

ACCESSION VERSION KEYWORDS

```
/tissue_traps.systato.
/tissue_traps.systato.
/lab_host="NHIOB"
/clone_lib="NHI_MGC_119"
/clone_lib="NHI_MGC_119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: ECORV (destroyed); RNA source normal medulla from
anonymous male age 27. Library is oligo-dT primed and
directionally cloned (EcoRV site is destroyed upon
cloning). Average insert size 1.3 kb, insert size range
0.9-3 kb. Library is normalized and enriched for
full-length clones and was constructed by C. Gruber
(Invitrogen), Research Genetics tracking code 013. Note:
this is a NIH_MGC Library."
                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1037)

1 (bases 1 to 1037)

2 NIH-MGC http://mgc.nci.nih.gov/.

3 National Institutes of Health, Mammalian Gene Collection (MGC)

3 Unpublished (1999)

4 Contact: Robert Strausberg, Ph.D.

5 Email: Gapbs-rémail.nih.gov

7 Issue Procurement: Life Technologies, Inc.

5 CDNA Library Preparation: Life Technologies, Inc.

5 CDNA Library Preparation: Life Technologies, Consortium (LLNL)

5 DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at:

6 CONSORTIUM/CON TOWN: 1 Column: 03

7 High quality sequence stop: 722.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCAGGCAGCCC 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGC 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCCAACCACGTCTACTA 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26 Trcrccesccareaseaasccasccecrescrrccrrccrcacrccreaaserscri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCCAACCTGGAAGGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTACCTCCGTCTCCGTGCAACCCAGGCTGCCGGAATCCCACACTCGTCCAGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCCATCTCACCCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99 CCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCCACCCCAGGCAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTACCTGCCGTCCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGTCCAGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39 ITCTCCGGCCATGAGGAAGCCAGCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCCAAGAGAGACTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTTAACACTCTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 753; DB 4; Length 1037; Pred. No. 0; 0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .1037
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5742482"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
```

ö

Gaps

82 9 180

262 240 322 300 382 360 442 420

202

g

ઠે g ò

ò

셤

엄

ઠે

g

à

ઠે

```
bp mRNA linear EST 04-OCT-2001
sapiens cDNA clone IMAGE:5170058 5',
                                                                                                                                                     61 TCCTGAAGGTGCTCCTCTGCCTCTGGCACCTGCCGCAGCATTCGACTCAGGCCT 120
                                                                                                                                     TCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCC 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST.
Homo sapiens (human)
Homo sapiens
Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
                                                                                                                                                                                                                   121 CCACTCCAGGCAGCCCTCTCTCTACCAAATACGAAACGCTTCTTCGCACTGCTGACTC
                                                                                                                                                                                                                                                                                                                                        241 CACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTGCT
                                                                                                                                                                                                                                                                              CCAACCACGTCTATGCCCAAGAGAGTCCTGTGTTCCCACCAGGTCTCTATTCTCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGCCTGCCGGAATCCCA
                                                                                                                                                                                                                                                                                                                        CACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                    CCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 TCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAGGAAGAGGGGCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAAGAAGGACAGGGACTAAGGACGGACGGGAGGCTGTGTGTCTCAGCTGCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTAACCCTTCCTCTTTTGCTCCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTTCTAACCCTTCCTCTTTTGCTCCC 836
                                               ;
0
                                              Indels
                   Length
                                               5;
                 DB 4;
               Score 734; DB
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           603078309F1 NIH_MGC_119 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI828365.1 GI:15939915
                 38.7%;
99.8%;
              Query Match 38.7
Best Local Similarity 99.8
Matches 834; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA sequence.
                                                                                                                                                                                                143
                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            443
                                                                                                                                                                                                                                                             203
                                                                                                                                                                                                                                                                                                                        263
                                                                                                                                                                                                                                                                                                                                                                                    323
                                                                                                                                                                                                                                                                                                                                                                                                                                                 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI828365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                     셤
                                                                          à
                                                                                                                                                             셤
                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                     8
                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                               BI830966 836 bp mRNA linear EST 04-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="IMAGE:5172457"
/tissue_type="medulla"
/lab_host="DH10B"
/clone_lib="NHH MGC_119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
/note="Corgan: brain; Vector: pCMV-SPORT6; Site_1: NotI;
anonymous male age 27. Library is oligo-dT primed and directionally cloned (BcoRV site_is destroyed upon
                                                                                         638
                                                                                                                       625
                                                                                                                                                    698
                                                                                                                                                                                685
                                                                                                                                                                                                                758
                                                            565
                                                                                                                                                                                                                                             745
                                                                                                                                                                                                                                                                           818
                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI1429 row: e column: 02
High quality sequence stop: 826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. 1 (bases 1 to 836)
MH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                                               CACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGA
                                                                                                     GATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCCCATCTCACCCCACTT
                                                                                     AGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCCAGAGCACAAGCA
                                                                                                                                                  GGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGGAGGAAGAGGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                    CTCTGAATCTCTATCTTAACCC 842
                                                                                                                                                                                                                                                                                                                                                         CTCTGAATCTCTATCTTCTAACCC 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI830966.1 GI:15942516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
BI830966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                             BI830966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST
                                                                                                                                                                                                                                                                                                     746
                                                                                                                                                  639
                                                                                                                                                                                                                                                                                                                                                               908
                                                         909
                                                                                                                                                                               979
                                                                                                                                                                                                                                          989
                                                                                     579
                                                                                                                    999
                                                                                                                                                                                                             669
                                                                                                                                                                                                                                                                        759
                                                                                                                                                                                                                                                                                                                                    819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                               BI830966
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
```

502 480 562 540 622 900 720

802

780

742

us-09-559-013e-23.oligo.rst

```
756 GGGGACTAAGGAGGGACGGAGGCTGTGTCTCA 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                          721 GGGGACTAAGGAGGGACGGAAGGCTGTGTCTCA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Invitrogen). Research Genethis is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM554310.1 GI:18793801
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5', mRNA sequence.
BM554310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .. .1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
BM554310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                              ò
                                                                                                                                   g
                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNM"
/mol_type="mRNM"
/db xref="taxon:9606"
/clone="mRNM="signed"
/tissue type="medula"
/lab_host="mHMGE:5170058"
/tissue type="medula"
/lab_host="mHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMGC:119"
/clone=lib="MHMG:119"
/clone=lib="MHMG:119"
/cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                Contact: Robert Strausberg, Ph.D.
Finsue Frobert Strausberg, Ph.D.
Finsue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Clone distribution: MGC clone distribution at:
Pitte: LLAMI1423 row: a column: 03
High quality sequence stop: 823.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 gerrecrecrecerecrecedenagecentreatres and an action of the second sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCTCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCCAACCTGGAAGGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTTCCCTTA 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGTCTA 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    516 CTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGT 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 823)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36 ATCTICICGGCCAIGAGGAAGCCAGCCGCIGGCTICCTICCCICACTCCTGAAGGIGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTCTCTGCTCCAACCTCCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATGCCAAGAGAGTCCTGTGTTCCCAGGCCAGTCTCTTCTCTCACCTAACACTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCCCATCTCACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4; Length 823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37.0%; Score 702; DB
99.9%; Pred. No. 0;
live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             752;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Lock
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
/organism="Homo sapiens"
/mol type="mcMNA"
/db_zere="texton:9606"
/clone="InMGE:574269"
/tissue_type="medulla"
/lab_host="blubling"
/lab_host="blubling"
/clone lib="NIH MGC 119"
/clone lib="Not lib ary is oliqo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average libsert size lib destroyed upon cloning). Average libsert size lib destroyed upon clone and was constructed by C. Gruber full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi,
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi,
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

B. (bases I to 1023)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at:
Plate: LLAM12760 row: k column: 04
High quality sequence stop: 735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1023 bp mRNA linear EST 20-FEB-2002
_6546682 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5742459
540
                                                                  635
                                                                                                                                    900
                                                                                                                                                                                                       695
                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                               755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                       601. GCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGG
                                                   576 GGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAA
                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
36.0%; Score 682; DB 4; Length 1023;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 732; Conservative 0; Mismatches 1; Indels
```

ò ď \$ B \$

셤 ઠે 셤 ઠે g ઠે 셤 ò g ò g δ g ઠે g ઠે 셤 Š g

```
CCTAACACTCTCAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCCACCACGATGACCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCTGGGAGGCCAGGAGCAA
   рę
                                                                                                                                                                                                                                                                                                                                                                         82 CTCCTGAAGGTGCTGCTCTCTGCCACCTGCCGCAGCCCAGGATTCGACTCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTGAAGGTGCTGCTCCTGCTCTGCCGCGCGCCCCAGGATTCGACTCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 CCCACTCCAGGCAGCCCTCTCTCTCTACGAATACGAACGCTTCTTCGCACTGCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     125 TCCACTCCAGGCAGCCCTCTCTCTCTCCCAATACGAACGCTTCTTCGCACTGCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCAGGGCTGCCGGAATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             185 CCAACCTGGAAGGCAGAGACTACCTGCCGTGCAACCCACGGCTGCCGGAATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245 ACACTGGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTGTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCATCTCACCCCACTTCACACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LINL at: http://image.lln.gov.plate: i.lmage.lln.gov.p column: 01 Plate: i.lmay sequence stop: 673. High quality sequence stop: 673.
                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                            4; Length 1012;
                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                           ch 35.8%; Score 678; 11 Similarity 99.9%; Pred. No. 0 728; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                425
                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                   Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                605
                                                                                                                                                                                                                                                                                                           Query Match
                                                                           source
                                                                                                                                                                                                                                                                                                                                   Matches
                                                              FEATURES
                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1012 bp mRNA linear BST 20-FEB-2002 AGENCOURT 6546640 NIH_MGC_119 Homo sapiens cDNA clone INAGE:5742576 BM554519
                                                 140
                                                                                  140 CCCCCACTCCAGGCAGCCCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGA 199
                                                                                                                       259
                                                                                                                                    CTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATC 260
                                                                                                                                                                       319
                                                                                                                                                                                              320
                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                                                                                      559
                                                                                                                                                                                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 1012)

NH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Contact: Robert Straubbrg, Ph.D.
Email: cgapbs.romail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
                                   261 CCACACTGGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCT
                                                                                                                                                                                                                                                                                     GCCTCAGCAACAACGTGGAAGAGCTCCTAGACTCCTCTTGTCCTCGGGAGGCCAGGAGC
                                                                                                                      CTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATC
                                                                                                                                                                                                                     CCACACTCGTCCAGCTGGACCAATATGAAAACCAGGCTTAGTGCCCGATGGTGCTGTCT
 CCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTCAGCAACAAGGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM554519.1 GI:18794182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGGAAGAAGG 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAGGAAGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                      200
                                                                                                                                                                     260
 21
                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    740
                         80
                                                                                                                                             201
                                                                                                                                                                                                                                                                    380
                                                                                                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
BM554519
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
```

ö

81 64 141 124 201 184 261 244 321 304 381 364 441 424 501 544

621 604 681 664

g

d à

```
ISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases 1 to 736)

RS NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

INDublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rômail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Location/Qualifiers

1. 736

/organism="Homo sapiens"
//mol type="manna"
                                                                                                      241 AGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI830145 736 bp mRNA linear EST 04-OCT-2001 603072776F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5164842 5', mRNA sequence.
                                                                           272 AGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCC 331
                                                                                                                                                                                      451
                                                                                                                                                                                                                                                                         TCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGACGATGACCTCCCCCATCTCAC 511
                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                               571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
               332 CTIAIGCCICCIGGITIGAGICTITCIGCCAGITCACTCACTACCGITGCTCCAACCAGG
                                                                                                                                                                                                                                                                                                                                                            CCCACTTCACAGAGACAGAAGGCCAGACCTTCCAGGCCTGGGGCTCAGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                              572 ACGIGGAAGAGCICCTACAAICCICCTIGGAAGGCCAGGAGCAAGCGCCAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BI830145.1 GI:15941695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           752 GACAGGG 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |||||||
721 GACAGGG 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI830145
                                     181
                                                                                                                                                                                                                                                   392
                                                                                                                                                                                                                                                                                                                                   452
                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                      512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
BI830145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                         ò
                                                                                                                 ద
                                                                                                                                                            ઠે
                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5171110"
/tissue_type="medulla"
/tissue_type="medulla"
/tissue_type="medulla"
/tlone="IMAGE:5171110"
/clone="IMAGE:5171110"
/clone="Drib"NIH_MGC_119"
/clone="Organ: brain; Vector: pGMV-SPORT6; Site_1: NotI;
Site_2: ECoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (ECoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                          603079494F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5171110 5', mRNA sequence.
             741
                             Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at:
http://image.llh.gov
Plate: LLAMI1425 row: 1 column: 23
High quality sequence stop: 774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 TGCTGCTCCTGCCTCTGGCACCTGCCGCAGGATTCGACTCAGGCCTCCACTCCAG 120
                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 779)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Techeciteriorgecacineceaecideceaecidadaricaacidagececcacineae 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              152 GCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGA 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 GCAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            212 AGGCAGAGACTACCTGCCGTCTGCAACCCACGGCTGCCGGAATCCCACACTCGTCC 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
682 AAGCAGGAAGAGGGGCAGAAACAGGAAGGGAAGAAGAGGAAACAGGAAAGAGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4; Length 779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
35.7%; Score 676; DB
Best Local Similarity 99.9%; Pred. No. 0;
Matches 726; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism≈"Homo sapiens"
                                                                                                                                                                                                                                                                                                                      BI829361.1 GI:15940911
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                    CAGGAAGAA 750
                                                                                                                        725 CAGGAAGAA 733
                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92
                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                         RESULT 9
BI829361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
```

g

ò

qq

à g ò

ò

```
1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
 LOCUS
DEFINITION
                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    영
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                               /clone_lib="MIH_MGC_119"
//clone_lib="MIH_MGC_119"
//clone='Crgan: brain, Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for [Inl-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library.
                                                                                                                                                                                                                                                                                                                                                                                                             TGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGGCTGCCCCACAC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1014 AGAGGCCTTGCTGGTGCTGTTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCAC 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGA 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCTTTGTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTC 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCCTTGGGCGCGACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCT 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGCAACAATGCGACACCTCCCACAAGAC 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1314 CCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTG 1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1374 GTGTGCCCGGCTTGCCACGAAAGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGAC 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1434 TGAGTICCTIAGCTICCAGGATGGGGATTICCCTACCAAGATTIGTGACACAGACTATAT 1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1494 CCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCG 1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1554 GAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAA 1613
                                                                                                                                                                                                                                                                                                                                                                                                                                    61 TGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAGCTGCCCCACAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 AGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCAC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361 TCCCTTTGTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGGGGTC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421 CCCAGAATCAGGCCGCTTTTACGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481 GTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCCGAGTCTCTGGGTGCCTCCAGAC 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 TGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATAT 600
                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 GGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGAC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661 GAAGGTGTCCCGCAFGAGAFGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAA 720
                                                                                                                                                                                                                                                                                                                                                          GGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601 CCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCG
                                                                                                                                                                                                                                                                                                                                   894 GGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 AGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 CAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCT
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                          Score 671; DB 4; Length 736;
Pred. No. 0;
0; Mismatches 1; Indels
/tissue_type="medulla"
/lab_host="DH10B"
                                                                                                                                                                                                                                                           35.4%;
                                                                                                                                                                                                                                                                           Best Local Similarity 99.9
Matches 721; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1614 AA 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    722
                                                                                                                                                                                                                                                                                                                                                                                                             954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1134 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1254
                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
```

RESULT 11 BI520181

```
/clone="IMAGE:5163366"
/tissue_type="medulla"
/lab.hoft="UNHOB"
/clone lib="WHH MGC 119"
/clone lib="WHH MGC 119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1332
BI520181 827 29 mRNA linear EST 29-AUG-2001
600071429F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5163366 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACGGCCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCCGGCTTGCCACG 1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ATGGAGGAGAGATCCTTGGTTTCGGGAAGTCGGTCATGACAGCCTTGGGCGGCGACAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                           E I (bases 1 to 827)

S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

AL Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LINL at:

http://inage.llnl.gov

Plate: LiAMAl1405 row: j column: 07

High quality sequence stop: 826.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 827)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGTCTACCTGTGCCTCTGTGCTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 TACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1033 TGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCCACGAGGCCTGGAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1093 ATGGAGGAGGAGTTCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGGCGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCCTCCCAGAGCCTGTCCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGCCGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 35.4%; Score 670; DB 4; Length 827; Best Local Similarity 100.0%; Pred. No. 0; Matches 670; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                       BI520181.1 GI:15344973
                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                  mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
```

Best Local Similarity 100.0%; Pred. No. 0; Matches 667; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  Qy 1228 CAACAATGCGACACCTCCCACAAGACTCCCTTGCTGCTCCCCAGAGC 1287	DD   241 ACCAAGATTTGTGACACATATCCAAAACTAATCTTTTTTTT	OY 1828 GGCCACGGTGGGAGCTCCTCTTAAAGATTGATTAAAATGTTCATCTATCA 600  Db 601 GGCCACGGTGGGAGCTGCCCCTCTTAAAAGATGACTTTACATAAAATGTTCATCTTCA 1887  OY 1888 AAAAAAA 1894  Db 661 AAAAAAA 667  RESULT 13  BIS20377  LOCUS  DEFINITION 603071855F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5163852 5', KEWADDA BIS20377  ACCESSION BIS20377  BIS20377  COUNTRY 863001855F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5163852 5', KEWADDA BIS20377  COUNTRY 86300185671 GI:15345169	Z
QY         1393 AAAGGCTGTGAAGATGTCCGAGTGGCTCCAGACTGAGTTCCTTAGCTTCCAG           Db         361 AAAGGCTGTGAAGATGTCCGAGTGGCTCCAGACTGCTTCCTTAGCTTCCAG           420         1453 GATGGGAATTCCCTACCAGACTCTCGGGTGGCTCCAGACTACTTGTTCCTTAGCTTCCAGACTTCCTAGCTTCCAGACTTCTGTTGTGACACAGACTATATCCAGAACTAGTTGTTGTGACACAGACTATATCCAGAACTACTGTTGTTGTGACACAGACTATATCCAGAACTAGTTGTTGTTGACACAGACTATATCCAGAACTATCTGTTGTTGTGACACAGACTATATCCAGAACTAGTTGTTGTGACACAGACTATATCCAGAAGTGTCCTGATGAGATTTCCTTAGAGAACCAGAACTGAGAACTGTTGTTGTTGAAAACCAGAACTGAGAACTGAGAACTGTTCTGATGAGAAACCAGAACTGAGAACTGTCCGCAAACTGAGAACTGTTGTTGTTGAAAAACCAGAACTGAGAAACCAGAATGAGAATGAGATCTTACAGTCCTCAGACCAAACTGAGAAAACTGAGAAAAACTGAGAAAAACTGAGAAAAACTGAGAAAAACCAGAAAAAAAA	RESULT 12 B1826973 LOCUS DEFINITION 603075871F1 NIH_MGC_119 Homo sapiens cDNA clone INAGE:5167696 5', ACCESSION B1826973. ACCESSION B1826973.1 G1:5938523 EST. VERSION B1826973.1 G1:5938523 EST. SOURCE ORGANISM HOMO sapiens (human) ORGANISM EVARYOCIA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; REPERENCE ORGANISM AUTHORS I (bases 1 to 718) AUTHORS III-MGC http://mgc.nci.nih.gov/. TITLE ORDANIAL Institutes of Health, Mammalian Gene Collection (MGC) COMMENT CONTACT: Robert Strausberg, Ph.D. Email: cgapbs r@mail.nih.gov COMMENT Email: cgapbs r@mail.nih.gov Email: cgapbs r@mail.nih.gov Email: cgapbs r@mail.nih.gov	Tissue Procurement: Life Technologies, Inc.  CDNA Library Preparation: Life Technologies, Inc.  CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)  DNA Sequencing by: Incyte Ganomics, Inc.  Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:  found through the I.M.A.G.E. Consortium/LLNL at:  http://image.lln.gov  Plate: LLAM11416 row: n column: 17  High quality sequence stop: 684.    1. 718	/ CLOUDE TIDE "ALL MGC_119" / NOTE= "COTGON DEAL!!) Vector: DCNV-SPORT6, Site_1: NotI; Site_2: ECORV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library.

35.2%; Score 667; DB 4; Length 718;

Query Match

Bmail: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

```
/clone="IMAGE:5163259"
/tissue type="medulla"
/lab.host="UNHUB"
/clone lib="NIH MGC 119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
/clone lib="NIH MGC 119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                         BI520136 891 bp mRNA linear EST 29-AUG-2001
603071275F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5163259 5',
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIH-WGC http://wgc.nci.nih.gov/.

NIH-WGC http://wgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11405 row: e column: 20

High quality sequence stop: 843.
                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 891)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTAGAGGCGGCTTGTGTCTCACGGGACGCGGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCGCTGGCTTCCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 891;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 665; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .891
/organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                BI520136.1 GI:15344928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 715; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                       BI52013
                                                                                                                                                                                                                                                                                                                                             EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S:
Matches 715
                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     185
                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                    BI520136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                  ò
                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="mRNA"
/do xref="taxon:9666"
/dlone="IMAGE:5163852"
/tissue type="medulla"
/lab host="DH108"
/clone lib="MIH MGC 119"
/clone lib="MIH MGC 119"
/clone sapiens brain, Vector: pCMV-SPORT6; Site_1: Not1;
/note="Organ: brain, Vector: pCMV-SPORT6; Site_1: Not1;
/note="Organ: brain, Vector: pCMV-SPORT6; Site_1: Not1;
/lab host="Organ: brain, Vector: pcm, V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCGCTGGCTTCCTTCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        266 ACCCACGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGITICACITCACITACCGITIGCITCCAACCACGICITACITATGCCAAGAGAGICCTGIGITICC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGGAAGGAGTGGAGCACAGG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGTCTTCTCCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACCCACCACGATGACCTCCCCCATCTCACCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCCAGCCCTGGCCTCAGCAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Triccascicitescergasascreascaacaresasasascreeracaareereerre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can lefound through the I.M.A.G.E. Consortium/LINL at:
http://image.lln.gov
Plate: LiAMil406 row: n column: 13
High quality sequence stop: 740.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGCCCGATGGTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 769;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 666; I
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 716; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

δ

ö

Gaps

9 64 120 124 240

요

8 8 8

g ò 유 상

g

강 쉽

ò 셤 8

```
Search completed: March 8, 2005, 03:32:19
Job time : 6467 secs
                                                                                                34.6%;
                                                                                                                 Local Similarity 99.9
                                                                                                                                                                                                                                 68
                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           488
                                                                                                                   Best Loc
                                                                  ORIGIN
                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

B 1 (bases 1 to 706)

S NIH-MCC http://mgc.nci.nih.gov/.

I Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11406 row: h column: 15

High quality sequence stop: 704.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI520382 706 bp mRNA linear EST 29-AUG-2001 603071860F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5163710 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
/db_xref='taxon:9606"
/clone="ImAGR:5163710"
/lissue type="medulla"
/lab_host="DH108"
/clone lib="NH1 MGC 119"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon
                                                                                                                                                                                                                                                                               544
                                                                                                                                                                                                                                                                                                                                                                            999
GTGCCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 360
                                                                       GIGCCCGAIGGIGCTGICTGCTCCCCCTTAIGCCTCCTGGTTTGAGTCTTTCTGC 364
                                                                                                                 420
                                                                                                                               CAGTTCACTCACTACTGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCC 424
                                                                                                                                                                             CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC 480
                                                                                                                                                                                              CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGAAGATAGAAGCTTCAGCTGAAGTC 484
                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                          TTCCAGCCCTGGCCTGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG 600
                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                           664
                                                                                                              CAGITCACTACCGITGCTCCAACCACGICTACIATGCCAAGAGAGTCCTGTGTTCC
                                                                                                                                                                                                                                           TCACCCACCACGATGACCTCCCCCATCTCACCCCACTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                              TTCCAGCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                                                         TCCCTGGGAGGCCAGGAGCGAGGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                           716
                                                                                                                                                                                                                                                                                                                                                                                                        CAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGGCAGAAACAGGAAGAGCAAGA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                      BI520382.1 GI:15345174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BI520382
             245
                                             301
                                                                                                            361
                                                                                                                                            365
                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                          485
                                                                                                                                                                                                                                                                                                                                         545
                                                                                                                                                                                                                                                                                                                                                                         601
                                                                            305
                                                                                                                                                                             421
                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
BI520382
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
```

cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH MGC Library." ö 120 187 180 247 240 307 241 GCTGCCGGAATCCCACACACGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCG 300 ATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCA 367 421 TCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCA 480 541 CCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTTG 600 427 TCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCA 487 607 608 GAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAAGGAGC 667 67 9 TCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACG GCGGCTTGTGTCCACGGGACGCGGATCTTCTCCCGGCCATGAGGAAGCCACGCCTG 61 GCTTCCCTCCCCCCCGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGG 128 ATTCGACTCAGGCCCCACTCCAGGCAGCCCTCTCTCTCCTACCAATACGAAGGCTTCT TCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACG GCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCG CCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGC CCTGGCCTGAGAGACACAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGG Gaps ö 4; Length 706; CGACACAGAACACACAGGAAGAGGGGGCAGAAACAGGAAGAGCA 713 1; Indels Score 655; DB Pred. No. 0; 0; Mismatches

725.6         38.3         773         4         BG719727         CD244111         AGENCOURT           725.2         38.3         949         6         CD244111         CD244111         AGENCOURT           725.2         38.3         949         6         CD244111         CD244111         AGENCOURT           725.2         38.3         919         4         BIS28870         BIS28870         603075034           722         38.1         769         4         BIS20375         BIS30145         BIS30146         BIS30146         BIS20317         G03079374         BIS30145         BIS20317         G03079374         BIS20312         G03079374         BIS20312         G030793124         BIS20312         G030793124         BIS20418         BIS20418         BIS20418         BIS20418         BIS20418         BIS20418         BIS20418         BIS20418         BIS20419         BIS20418         BIS20419         BIS20419         BIS20419         BIS20419         BIS20419         BIS20419         G03074679         BIS20418         G03071861         BIS20418         G03	BMS54354  BMS54354  AGENCOURT 6546668 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5742482 55, mRNA Sequence. BMS54354.1 GI:18793882  EST. BMS54354.1 GI:18793882  EST. Homo sapiens  EUKARYOCA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Homo sapiens Homo sapiens Homo sapiens  EUKARYOCA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  1 (bases I to 1037) NIH-MGC http://mgc.nci.nih.gov/ National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999) Contact: Robert Strausberg, Ph.D. Email: cgapbs-remail.nih.gov Tissue Procurement: Life Technologies, Inc. CONA Library Preparation: Life Technologies, Inc. CONA Library Arrayed by: The I.M.A.G.E. Consortium(LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:	/tissue_type="medulla" /lab host="DHIDB" /clone_lib="NH MGC_lig" /clone_lib="NH MGC_lig" /note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI; /note="Corgan: brain; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: ECGRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (ECGRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RESULT 1 BMS 54 354 LOCUS DEFINITION ACCESSION VERYORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL COMMENT REATURES SOURCE	ORIGIN
GenCore version 5.1.6  Copyright (c) 1993 - 2005 Compugen Ltd.  OM nucleic - nucleic search, using sw model  Run on: March 7, 2005, 14:11:37; Search time 7500 Seconds (without alignments) 9617.572 Million cell updates/sec  Title: US-09-559-013E-23 9617.572 Million cell updates/sec  Perfect score: 1895 Sequence: 1 gttagaggcggcttgtgtcctgttgatcttcaaaaaaaa 1895 Scoring table: IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Searched: 34239544 seqs, 19032134700 residues Total number of hits satisfying chosen parameters: 68479088	um DB seq length: 0  um DB seq length: 200000000  processing: Minimum Match 100* Listing first 45 summaries  BST:*  BST:*  BST:*  1: gb_est:**  3: gb_est:**  5: gb_est:**  5: gb_est:**  6: gb_est:**  7: gb_est:**  8: gb_gss:**  9: gb_gss:**  7: gb_est:**  8: gb_gss:**  8: gb_gss:**  9: gb_gss:**  1: gb_est:**  4: gb_est:**  5: gb_est:**  6: gb_est:**  7: gb_est:**  8: gb_gss:**  9: gb_gss:**  8: gb_gss:**  7: gb_est:**  8: gb_gss:**  9: gb_est:**  8: gb_gss:**  9: gb_gss:**  8: gb_gss:**  9: gb_gss:**  1: gb_est:**  7: gb_est:**  8: gb_gss:**  9: gb_gss:**  9: gb_gss:**  9: gb_gss:**  9: gb_gss:**  1: gb_est:**  9: gb_gss:**  8: gb_gss:**  9: gb_gss:**  9: gb_gss:**  9: gb_gss:**  9: gb_gss:**  8: gb_gss:**  9: gb_gss:**  8: gb_gss:**  9: gb_gss:**  8: gb_gss:**  9: gb_gss:**  8: gb_gss:**	11       823.2       43.4       991       4       BIR25474       BIR355474       603072219         12       793.6       41.2       825       4       BIR825274       BIR825474       603072219         13       793.6       41.2       825       4       BIR825274       BIR82365       603073039         14       793.6       41.6       854       4       BIR826371       603076231         15       782.8       41.3       827       4       BIR826371       603076231         16       779.4       41.1       847       4       BIR827105       603074229         17       40.8       909       4       BIR827105       BIR827105       603074126         18       766.4       40.4       849       4       BIR82810       BIR827105       603074126         19       764.8       40.4       866       4       BIR82810       BIR828111       BIR828111       AUGUAL       BIR82810       BIR

```
AGENCOURT_6546785 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:574226
BM553910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGAACAATATGAAAACCACGGCTTA 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GIGCCCGAIGGIGCIGCTGCTCCAACCTCCTIAIGCCTCCTGGTITGAGICTITCTGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukanyogia.

Bukanyogia.

Bukanyogia.

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

I (bases I to 1026)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                              þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTAGAGGCGGCTTGTGTCCACGGGACGCGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 ACCCACGGCTGCCGGAATCCCACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTAGAGGCGGCTTGTGTCCACGGGACGCGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cecrircirioscaciosciosacioscas estas de casa de contraciones de contraciones de contraciones de contractor de contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gabs
                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can lfound through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMIGO row a column: 11
High quality sequence stop: 713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 1026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 942.4; DB 4;
Pred. No. 1.6e-224;
0; Mismatches 27;
                                                                                                                        BM553910.1 GI:18793058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 97.0%;
Matches 992; Conservative
                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
       RESULT 2
BMS53910
LOCUS
DEFINITION
                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                           139
                                                                                                                                                                                                                                               152
                                                                                                                                                                                                                                 212
                                                                                                                                                                                                                                                                                                          272
                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    739
                                                                                                                                                                                                                                                                                                                                                                                     332
                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                      452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCCTAACACTCT 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAA 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTTCACTCTGAATCTCTATCTTCTAA-CCCTTCCTTTTGCTCCCCGGGTACGAAG 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92
                                                                                                                  79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAGAGICTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAAA 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    992 GCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGTGTGTTCGATCGTGGA 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            980 GCCTCCTGCAGACTGCCCACACACAGACCTTGCTGCTGGTGCTGGGCTATTCGAACGTGAA 1037
                                                                                                                                                                       GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCCAGGATTCGACTCAGGCCTCCACCACGG
                                                                                                                                                                                                                                                                                                    GGCAGAGACTACCTGCCGTCTCCGTGCAACCCAAGGCTGCCGGAATCCCACACTCGTCCA
                                                                                                                                                                                                                                                                                                                            GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                         CGGGATTICTCCGGCCATGAGGAAGCCAGCCGCTGGTTCCTTCCCTCACTCCTGAAGGT
                                                                                                                                                  GCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGG
                                                                                                                                                                                                                         CAGCCCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAA
                                                                                                                                                                                                                                                                                                                                                                               GCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGCTCCAACCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGGAAGAGCTCCTACAATCCTCCTTGTCCTGGGAGGCCAGGAGCAAGCGCCAAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAGCAGGAGCAAGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGATGAAATGAATATATATATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACTATGCCAAGAGACTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGCAGGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTTCACTCTGAATCTCTATCTTCTAACCCCTTCCTCTTTTGCTCCCCGGGTACGAGAG
                                             Gaps
                                           1;
   Length 1037;
Query Match 52.2%; Score 990; DB 4; Length 10 Best Local Similarity 98.9%; Pred. No. 1.9e-236; Matches 1007; Conservative 0; Mismatches 10; Indels
                                                                                                              20
                                                                                                                                                  93
                                                                                                                                                                                       80
                                                                                                                                                                                                                           153
                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                    213
                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                               273
                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                      333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 932
                                                                                                        g
                                                                                                                                                                           q
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

ğ

Š q ò g ò g ð g ò 셤 ઠે g ઠે d ઠે a ò g ò g ઠ g δ 셤

```
/clone_lib="NIH MGC_II9"
//clone_lib="NHH MGC_II9"
//clone_lob="Organ: brain; Vector: pCMV-SPORT6; Site_l: NotI;
//site_legen: brain; Vector: pCMV-SPORT6; Site_l: NotI;
//clone_lobe reserved; RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 CTCCTGAAGGTGCTGCTCCTGCCACCTGCCGCAGCCCAGGATTCGACTCAGGCC 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCCAGGATTCGACTCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501 CCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCACTCCAGGCAGCCCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 TCCACTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201 CCAACCTGGAAGGCAGAGTTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGGATGGTGCTGTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261 ACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCATCTCACCCCACTTCACAGTGACAGCCCCAGACCTTCCAGCCCTGGCCTGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTGGGAGGCCAGGAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACACGAGGAGCCGACACAAGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLANLy sov: i column: 17
High quality sequence stop: 758.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       tch 49.4%; Score 936.2; DB 4; al Similarity 99.0%; Pred. No. 5.7e-223; 963; Conservative 0; Mismatches 8;
                                                                                                                             organism="Homo sapiens"
                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5742040"
/tissue_type="medulla"
                                                                                                                                                                                                                    /lab_host="DH10B"
                                                                                                         1. .1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1076 bp mRNA linear EST 20-FEB-2002 G560257 NIH_MGC_119 Homo sapiens cDNA clone IMAGB:5742040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAACTCCTACTGGA-GAAACCCAGACCTGGCAGCTTCCTGCAGCTGCCCCCACACAGAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964 AAAACTCCTACTGGAGGAAACCAAACCCTGGCAGCCTCCTGCAGCTGGCCCCCACAAA 1023
                                                                                                         480
                                                                                                                                                                                540
                                                                                                                                                                                                                                                     009
                                                                       424
                                                                                                                                                                                                                  544
                                                                                                                                                                                                                                                                                                                           099
                                                                                                                                            484
                                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACAGGAAGAGGAGGAAAGCAGGAAGAAGAAGGACAGGGACTAAGGAGGACGGGACGCT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAT--GAAATATATGATG 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             904 ATCCAGGAGCTCATTCGATCAGNCCCAGAAATAGATGGAATGGGAATATATGGATG 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 1076)
                                                                                                                                                                                               TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTG
                                                                                                                                                                                                                                                                                                                                            GTGTCTCAGCTGCAGACAGACCAAGGTTTCACTCTGAATCTCTATCTTCTAAC
GTGCCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTTGAGTCTTTCTGC
                                                    365 CAGITCACTACCATACCTCCAACCACGICTACIATAGCCAAGAGAGTCCTGTGTTCC
                                                                                                                        TTCCAGCCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTG
                                                                                                                                                                                                                                                                                                                         TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTCTCAGCTGCAGACAGACTCCAAAGTTTCACTCTGAATCTCTATCTTCTAAC
                                                                                                       CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                            TCACCCACCACGATGACCTCCCCCATCTCACCCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACAGGAAGGAGGGAAAGCAGGAAGGAAGGAAGGGGACTAAGGAGGGACGGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BM564020.1 GI:18811457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGENCOURT 6560257
5', mRNA sequence.
BM564020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGC 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BM564020
                                                                                                                                         425
                                                                                                                                                                          481
                                                                                                                                                                                                              485
                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                    545
                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                           605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1018
                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
BM564020
```

7

Gaps

81

260

321 320 381 380 441

140

201 200 261 440

501 500 561 560 621 620

681 680

75

78

198

258 255 318 315 438

셤 à g ò g ò g ò g ò

```
195
                                                                                                                                                                                                                                                                                                                                                                                                                                       378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     973
                                                                                                          GCCCCCACTCCAGGCCCTCTCTCTCTCCCAAATACGAAGGCTTCTTCGCACTGGTG
                                                                                                                                                                                                                                               ACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCAACGCTGCCGGAAT
                                                                                                                                                                                                                                                                                                           CCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGCTCAGGAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTTGGGAAGGCCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGCGCCAGAGCAGGAGCAAGGAGTGGAGCACA - GGCAGGAGACCGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAAGCAGGAAAAAGACAGGGACTAAGGAGGGACGGGAGGCTGTCTCAGCTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     797 CAGACTCAGAGCCCCAAGTTTCACTCTGAATCTCTATCTTAACCCTTCCTCTTTTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              915 CATCACCCCAGGAAATAGATGAATGAATG-AATAAATGATGAGAACTCCTACTGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856 CCCGGGTACCAGAGGAGGAGGAGCCTACCTCTATGATAATGGAG-ACATCCAGGAGCTCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATCAGCCCAGGAAATAGATGAAATGAAATATATATGATGAGAACTCCTACTGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         977 ACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGGTGGTGGTGTGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŝ
                           Length 1074;
                                                         Indels
                     Score 928.8; DB 4;
Pred. No. 4e-221;
0; Mismatches 42;
                  A9.0%;
Best Local Similarity 95.5%;
Matches 1009; Conservative
                                                                                    13
                                                                                                                                                                                                                        139
                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                            319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            917
                                                                                  8 8
                                                                                                                                                ð
                                                                                                                                                                            임
                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. 1074
| . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 1074 | . 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

E 1 (bases 1 to 1074)

In (bases 1 to 1074)

National Institutes of Health, Mammalian Gene Collection (MGC)

Antional Institutes of Health, Mammalian Gene Collection (MGC)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be http://image.llni.gov. G.E. Consortium/LiNL at:

Plate: LlAM12759 row: f column: 23

High quality sequence stop: 623.

Location/Qualifiers

Inca
                                                                                                                                                                                                                                                                                                                                                                                                                                              AGENCOURT_6560351 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5741974
BM563920
            741
                                                                                                             800
                                                                                                                                                860
                                                                             801
                                                                                                                                                                                  860
                                                                                                                                                                                                    GGTACGAGAAGTAGAGTGTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATC 920
                                                                                                                                                                                                                         AGCCCAGGAAATAGATGAATGAATGAATATATATGATG-AGAACTCCTACTGGAGAAACC 979
                                                                                                                                                                                                                                                                                            aagcaggaagaggggagaaaacaggaaggcaagaagaggaaggaaagaggaaag
                                                                TCAGAGCCCAAGTITCACTCTGAATCTCTTCTA-ACCCTTCCTCTTTGCTCCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BM563920.1 GI:18811265
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                       980 AAAACCCTGGCAG 992
                                                                                                                                                                                                                                                                                                                                                                      981 ÁAAACCTGGGCGG 993
                                                                742
                                                                                                   741
                                                                                                                                 802
                                                                                                                                                                   801
                                                                                                                                                                                                                                    861
                                                                                                                                                                                                                                                                      921
                                                                                                                                                                                                                                                                                                       921
                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
BM563920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
```

FEATURES

1037 ATTCGATCGTGGAGAATACCTGCATCATAACCCCCA 1072

ò

ORIGIN

셤

```
BMS63837 1093 bp mRNA linear EST 20-FEB-2002
FAGENCOURT _ 5560348 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5741926
                                                                                                                                                          435
                                                                                                                                                                                                                                  495
                                                                                                                     434
                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                 614
                                                                                                                                                                                                                                                                                                                                                                       675
                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                             674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          915
         256 GAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGC 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo. 1 (bases 1 to 1093)
NIH-WGC http://mgc.noi.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                     436 TCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCACCACGAT
                                                                 316 TGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTA
                                                                                                                   496 GACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTG
                                               GACCTCCCCCATCTCACCCCACTTCACAGTGACAGACGCCAGACCTTCCAGCCCTGGCC
                                                                                                                                                                                                                                                                                                                                                 555 TGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAAAGCAGGAAGAA-GGACAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      796 AGACAGACTCAGAGCCCCAAGTTTCACTCTGAATCTCTTTTTTAACCCTTCCTCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCCCGGG--TACGAGAAGTAGAGTCTACT-CCTATGATAATGGAGAACATC-CAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856 CTCCCCGGGGTACGAGAAGTAGAGTCTACTCCCTATGATAATGGAGAACATCNCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  910 CTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATAAAATATATGAGAACTCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        916 CTCATTCGATCAGCCCAGNAAATAGATGGAATGAATGGAATATATGATGAGAACTCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 976 TGGAAGAAAAACCCTGGAAGCCCTCTGCAGCTGCCCCACAAAG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BM563837.1 GI:18811108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5', mRNA sequence.
BM563837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST
                                                                                                                                                                                              435
                                                                                                                                                                                                                                                                                                                                                                                                                             615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           794
                                                                                                                                                                                                                                                                        495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM563837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                         ઠે
                                                                     g
                                                                                                               ò
                                                                                                                                                  셤
                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                       ठे
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="IMAGE:5742459"
/tissue_type="medulla"
/lab_host="UnhIDB"
/clone lib="Wilh MGC 119"
/clone lib="CoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                 bp mRNA linear EST 20-FEB-2002
Homo sapiens cDNA clone IMAGE:5742459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               195
                                                                                                                                                                                                                                                                                                               B I (bases 1 to 1023)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM12760 row: k column: 04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGAC 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGGCCCCCACTCCAGGCCACCCTCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAGCCCACGCTGCCG 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGC 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75
                                                                                                                                                                                                                                                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1023)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTCCACGGGACGCGGATCTTCTCCGGCCATGAGGAAGCCAGCGCGCTGCTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGGCCTCCACTCCAGGCAGCCCTCTCTCTCTCCTACCGAATACGAAGGCTTCTTCGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGACTCCAACCTGGAAGGCAGAGTTACCTGCCGTCTCCGTGCAACCCACGGCTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 48.8%; Score 925.6; DB 4; Length 1023; Local Similarity 97.4%; Pred. No. 2.5e-220; nes 982; Conservative 0; Mismatches 21; Indels 5;
1033 ATTCCACGGGGAAAAAACCTGAATATAACCCCCA 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .1023
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence stop: 735.
Location/Qualifiers
                                                                                                               AGENCORT 6546682 NIH MGC_119:
5', mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                          BM554310.1 GI:18793801
                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                        ACCESSION
                                                                             RESULT 5
BM554310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DRIGIN
```

ઠ 엄 ઠે g · & g ò g ठ φ

740 798 800 857

```
/mol type="mRNA"

/db_xref="taxon:9606"
/clone="MARSE:5742844"
/clone="MARSE:5742844"
/tissue_type="medulla"
/lab_host="hH108"
/clone=lorgan: brain; Vector: pCMV-SPORTE; Site 1: Not!;
Site_2: ECORV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (ECORV site is destroyed upon cloning). Average insert size 1:3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENKATYOTA: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
ENKATYOTA: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
En (bases 1 to 1122)

NIH-MGC http://mgc.nci.nih.gov/.

In The contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: MGC Consortium (LLNL)
DNA Sequencing Dy: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can be http://magg.llnl.gov
http://magg.llnl.gov
Location/Qualifiers
ince 1123/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                            BM553134 1122 bp mRNA linear EST 20-FEB-2002
AGENCOURT 6542382 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5742844
5, mRNA sequence.
BM553134 GI:18791598
                                                                                                                                                                                                                    801 GACTCAGAGCCCAAGTTTCACTCTGGATCTCTTATCTTCCTAACCCTTCTTTTGCTCC 860
                                                                                                                                                                                                                                                                          858 CCGGGTACGAGAAGTAGAGTCTACCTATGATAATGGAGAACATCCA-GGAGGTCATTC 916
                                                                                                                                                                                                                                                                                                             861 CCGGGTACGAGAGAGAAGAGCCTACCCTATGAATATGGGAGACATCCAGGGAGCTCATTC 920
                                                                                                                                                                                                                                                                                                                                                      GATCAGCCCAGG-AAATAGATGAATGAATTATATATATGAT-GAGAACTCCTACT---G 971
                                                                                                                                                                                                                                                                                                                                                                             AAGCAGGAAGAAGGACAGGGACTAAGGAGGGACGGAGGCTGTGTGTCTCAGCTGCAGACA
                                                                                                                                                                                              799 GACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTT-CTAACCCTTCCTTTTTGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAAACCAAAAACCTGGCAGCTTCCTGCCCCCCCACAGAGG-----CCTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1027 GIGCIGIGCIATICGAICGIGGAGAATACCIGCAICAIAACCCCCACAGCCAA 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1041 GCTGİĞGCTAAİCCGATCGGGAAAATACCİĞGAİTAİTAACCCCCAAĞGCCA 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .1122
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST
                                           619
                                                                                                                     739
                                                                                                                                                                                                                                                                                                                                                        917
                                                                                                                                                                                                                                                                                                                                                                                                                                   972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BM553134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                      요
                                                                                                                                                g
                                                                                                                 ò
                                                                                                                                                                                              à
                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                  1..1093
| Organism="Homo sapiens" |
| Organism="Homo sapiens" |
| Mol_type="mRNA" |
| Mol_type="mRNA" |
| Mol_type="mRNA" |
| Ab_xref="mRNA" |
| Iab_host="DH10s" |
| Clone lib="mH MGC ils" |
| Abce="Organ: brain; Vector: pCMV-SPORT6; Site 1: Not1; Site_2: ECGNV (destroyed); RNA source normal medulla anonymous male age 27. Library is oligo-dr primed and anonymous male age 27. Library is oligo-dr primed and cloning). Average innert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCACTCCTGAAGGTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCACTCCTGAAGGTGCTGCTCCTCTGGCACCTGCCGCAGCCAGGATTCGACTCAG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCCAACCTGGAAGGCAGAGTACCTGCCGTCTCCGTGCAACCCAAGGCTGCGGAAT 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTC 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCACCACGATGACC 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           680
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: Liman2759 row: d column: 23
High quality sequence start: 11
High quality sequence stop: 724.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCCCACCAGGCCAGCCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201 ACTCCAACCTGGAAGGCAGAGACTACCTGCGTTCTCGTGCAACCCACGGCTGCCGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTCCAACCTCCCTTAIGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTGCTACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOCCCCATCTCACCCCACACACACACACACACACACACATTCCAAGCCCTGGGCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           559 AGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTTGGGAGGCCAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAGCGCCAGAGGACAAGGAGCAAGGAGTGGAGCACAAGGCAGGAGCCGAAGAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 909; DB 4; Length 1093;
Pred. No. 3.7e-216;
0; Mismatches 50; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 48.0%; Best Local Similarity 94.2%; Matches 1011; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

셤 ò 셤

g ò

8 qq 6 B 6

යි යි d è d

셤 ઠે

qq ò

ò

Db 984 TGATGAGGAACTCCTACTGGAAGAACCAAAACCTGGGGAAGCCTCCTGCAGGTTGCCCAA 1043	Qy         1012 ACAGAGGCCTTGCTGGTGCTGTTCGATCGTGGAGAATACCTGCATCATAA 1066           Db         1044 ACAAAGGCCTTTGCTGGGGTTTGGTGGCAATTTCCATCGGAAGAAACCTGCATTATAA 1103           Qy         1067 CCCCCACAGCCAAGGC 1082           Db         1104 CCCCCACAGGCACAGGC 1119	BM554519 1012 bp	ON AGENCOURT 6546640 NIH_MGC_119 Homo sapiens 5', mRNA Sequence.  N BMS54519 N BMS54519.1 GI:18794182	KEYWORDS EST. SOURCE Homo sapiens (human) ORGANISM Homo sapiens Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,	mammalia; burderia; Frimates; 1 (bases 1 to 1012) NIH-MGC http://mgc.nci.nih.gov National Institutes of Health,	Comment Contacts to the transport of the Comment of the Contact Straugher of the Comment of the Contact of the	CUNA Library Arrayed by: The Technologies, inc. CDNA Library Arrayed by: The T.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be	round rarough the 1.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov. p column: 01 Plate: LLAM12760 row: p column: 01 High quality sequence stop: 673.	FEATURES LOCATION QUALITIETS SOURCE 1.012 / Organism="Homo sapiens" /mol_type="mRNA"	/db_xref="taxon:9606" /clone="IMAGE:5742576" /tissue_type="medulla" /lab_hogt="DH10B"	/clone_lib="NiH MGC_lip" /note="forgan: brain; Verloct: pCMV-SPORT6; Site_l: NotI; Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27, Library is oligo-dT primed and	directionally cloned (EcckV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (1)	(INVICTOGEN). REBEATCH GENETICS LEACKING CODE UIS. NOTE: CRIGIN	45.5%; Score 861.8; DB 4; Length 1012; imilarity 97.0%; Pred. No. 2.3e-204; ; Conservative 0; Mismatches 22; Indels 6; Gaps	Qy 20 CACGGGACGCGGATCTTCTCCGGCCATGAGGAAGCCAGCC	Ay 80 CACTCCTGAAGGTGCTCCTGCCTCTGGCACCTGCCGCAGCATTCGACTCAGG 139	Qy 140 CCCCCACTCCAGGGAGCCCTCTCTCTCCCAATACGAATACGAACGCTTCTTCGCACTGTAA 199
(Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."	Query Match         46.9%; Score 888.8; DB 4; Length 1122;           Best Local Similarity         93.5%; Pred. No. 4.2e-211;           Matches 1025; Conservative         0; Mismatches           Qy         1 GTTAGAGGCGGCTTGTGTCCAGGGACGCGGATCTTCTCCGGCCATGAGGAAGCCA           60	Db   25 GTTAGAGGGGCTTGTGTCCACGGGACGGGGTGTTCTCTCGGCCATGAGGAAGCCA 84     Qy	OY 121 GCCCAGGATTCGACTCAGGCCCCCACTCCTCTCTCTCTACCGAATACGAA 180	OY 181 CGCTTCTTCGCACTGCTGACTCCAAACGCAGAGACTACCTGCCGTCTCCGTGCA 240	OY 241 ACCCACGGCTGCCGGAATCCCACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA 300	Qy 301 GTGCCCGATGGTGCTGCTCCAACCTCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 360  125 GTGCCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 384	OY 361 CAGTICACTACCGTTGCTCCAACCACGTCTATGCCAAGAGTCTCTGTTCC 420	OY 421 CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGAGATAGAAGCTTCAGCTGAAGTC 480	OY 481 TCACCCACCACGATGACCTCCCCCATCTCACCCTTCACAGTGACAGACGCCAGACC 540	OY 541 TICCAGCCCTGGGAGGGCTCAGCAACAACGTGGAAGAGCTCCTACAAICCTCCTTG 600	OY 601 TCCCTGGGAGGCCAGGAGCAAGCGCCAGAGCAGAGCAGGAGCAAGAGTAGAGCACAGG 660	OY 661 CAGGAGCGGACACAAGAGAGGAGAGAGAGAGAAAGAGAAGA	OY 721 GAACA-GGAAGAGGAAGAAGAAGAAGAAGAGGAGGGGACTAAGGAGGAGGGG 776 		Qy         837         TAACCCTTCCTCTTTTGCTCCCC-GGGTACGAGAAGTAGAAGTCTACCTATGATAAT-G         894           Dh         864         TAACCCTTCCTCTTTTTGCTCCCCCGGGGAAGGTACGAGAACCTATGATAATGGGAGAAGGAAG	895 GAGAACATCCAGGAGCTCATTCGATCAG-CCCAGGAAATAGATGAAATGAA	954 TGATGA-GAACTCCTACTGG-AGAAACCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCAC

α

g

à

ò

셤

8 8 ò g

ద ò

셤

ò

g

ò

a

ò g à 셤 ઠ 셤 ò qq ò g

ò

```
1. ..836

/organism="Homo sapiens"
//moltype="mkmy"
//db xref="taxon:9606"
/dolone="IMAGE:5172457"
/tissue_type="medulla"
/lab host="DH10B"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone_lib="NIH_MGC_119"
/clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                   þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTGAAGGTGCTGCTCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rctranderecreterrecererecerecrecedededededantedactededeer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 CAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACTCCAGGCAGCCTCTCTCTTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 CACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACTACCGTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTTGGGAGGCCAGGAGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
          Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can lfound through the I.M.A.G.E. Consortium/LLNL at:
Plate: Liminge.llnl.gov. e column: 02
Plate: Liminity sequence stop: 826.
High quality sequence stop: 826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 836;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 832.8; DB 4;
Pred. No. 4.1e-197;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Invitrogen). Research Genthis is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.8%;
Matches 834; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                             379
                                                                                                                                                                                                                                                   362
                                                                                                                                                                                                                                                                                           439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bp mRNA linear EST 04-OCT-2001
sapiens cDNA clone IMAGE:5172457 5',
CCTCCACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGA 182
                                                                 319
                                                                                                                                             422
                                                                                                                                                                                                                                                                                                                                                                         499
                                                                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                                      559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTCAGAGCCCAAGTTTCACTCTGAATCTTCTAACCTTCCTCTTTTGCTCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGGTACGAGAAGTAGAGTCTACTCCTATG-ATAATGGAGAACAT-CCAGGAGCTCCATTC 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                        CTCCAACCTGGAAGGCAGAGACTACCTGCCGTCCCGTGCAACCCACGGCTGCCGGAATC
                                                                                                                    CCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCT
                                                                                                                                                                                                    GCTCCAACCACGTCTACTATGCCAAGAGTCCTGTGTTCCCAAGCCAGTCTCTATTCTCT
                                                                                                                                                                                                                                                                                                                                                                                      620 AAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGGCGGACAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCTGGGAGGCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCCATCTCACCCCTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    740 AGCAGGAAGAAGGACAGGGGACTAAGGAGGAG-GGGAGGCTGTGTGTGTGTGTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dacricadadciccaadgricacricadarcriciarcriciaaccciccricitriacric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        843 GGGTACGAGAAGTAGAGTCTACTCCTATGAATAAGGGAGAACATCCCAGGAGCTCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 836)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (WGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATCAGCCCAGGAA---ATAGATGAAATGAAATATATATGATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603080803F1 NIH MGC_119 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BI830966.1 GI:15942516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence.
BI830966
                                                                                                                                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                        200
                                                                              183
                                                                                                                                                              243
                                                                                                                                                                                                    320
                                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                   380
                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
BI830966
```

g

ઠે

ò

qq ઠ 셤 ò 셤

```
603072219F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5164036 5', nRNA sequence.
B1825474
B1825474.1 GI:15937024
EST.
                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            837
                                                                                                                         240
                                                                                                                                                           244
                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                    184
                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784
                    GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 991)
                                                                                                                                                                                                                  245 ACCCACGCTGCCGGAATCCCACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545 TTCCAGCCCTGAGAGGCTCAGCAACAACGTGGAAGAGGCTCCTACAATCCTCCTTG
                                                                                                                                              CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              725 GAACAGGAAGCAGGAGGGAAAGCAGGAAGAAGAAGAAGGACGGACTAAGGAGGAGGACGGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780 TGTGTCT-CAGCTGCAGACAGACTCA-GAGCCCCAAGTTTCACTCTGAATCTTCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCTTCTTCGCACTGCTGAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCA
                                                                                                                                                                                              241 ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA
                                                                                                                                                                                                                                                                  GTGCCCGATGGTGCTGTCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC
                                                                                                                                                                                                                                                                                      CAGITCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTTCC
                                                                                                                                                                                                                                                                                                                                                                        cagricacicaciaccericcaaccacgiciargecaagagagiccigigiric
                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCAGTCTCTATTCTCTCACCTAACACTCCAAGGAGATAGAAGCTTCAGCTGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACCCACCACGATGACCTCCCCCATCTCACCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  485 TCACCCACCACGATGACCTCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCCTGGGAGGCCAGGAGCAAAGCGCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGAGCCGACACAAGAACACCAAGCAGGAAGAGGGGCCAGAAACAGGAAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721 GAACAGGAAG-AGGAGGGAAAGCAGGAAGAAGACGAGGGGACTAAGGAGGGACGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
838 -AACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTA 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   845 AAACCCTTGCTCTTTTGCCCCCGGGGTACGAGAAGTAGAGTTA 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                          365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                    65
                                                                                      125
                                                                                                                         181
                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                              425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
BI825474
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                          8
                                                                           q
                                                                                                                      8
                                                                                                                                                 셤
                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_type="mRNA"
/db_type="mRNA"
/clone="IMAGE:516329"
/tissue_type="medulla"
/tab_host="mHyde:516329"
/clone_lib="NHH MGC_119"
/clone_lib="NHH MGC_119"
/note="organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27 . Library is oligo-dr primed and directionally cloned (EcoRV site.is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
E 1 (bases 1 to 891)
NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11405 row: column: 20
High quality sequence stop: 843.
                                                                                                                                                                                                                                                                                                                                      BI520136 891 bp mRNA linear EST 29-AUG-2001
603071275F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5163259 5',
                                                                                                     720
                  742
                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCGCTGGCTTCCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                  AGCAGGAAGAGGGGAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGGGGAAAGC
                                                                                        CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTAGAGGCGGCTTGTGTCTCCACGGGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
CGCCAGAGCACAAGCAAGAAGGAGTGGAGCACAGGCAGGAGCCGACACAAAAACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 891,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 828; DB 4; L. Pred. No. 6.6e-196; 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                           BI520136.1 GI:15344928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 99.0%;
Matches 875; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                          mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                   661
                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                  683
                                                                                                                                        743
                                                                                                                                                                                                             803
                                                                                                                                                                                                                                              781
                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                   RESULT 10
BI520136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
```

ద ò

ò

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Makaryota; Butheria; Primates; Catarrhini; Hominidae; Homo.

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mil (bases 1 to 825)

Mil-MGC htp://mgo.nd:.nih.gov/.

Mul Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: Gapdbs-remail: nih gov
Tissue Procurement: Life Technologies, Inc.

CONTA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Paraged Py: The I.M.A.G.B. Consortium (LLML)

My Sequence top: R.B. Consortium/LLML at:

http://inage.llnl.gov

Colone Library page Inc.

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library leaded:

//colone Library l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI825274 825 bp mRNA linear EST 04-OCT-2001 603071974F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5163978 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721 GCAGGAAGAAGAACCAGGGGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGCAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                    ACTCAGAGCCCAAGTTTCACTCTGAATCTCTA-TCTTCTAACCCTTCCTCTTT--GCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACA-TCCAGGAGCTCA-T
                                                                                                                                                                               GCAGGAAGAAGGA - CAGGGGACTAAAGGAGGGACGGGAGGCTGTGTCTCAGCTGCAGACAG
                                                              901 TCGATCAGCCCAGGAAAT 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGATCAGCCCAGGAAAT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI825274
BI825274.1 GI:15936824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                       800
                                                           621
                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                   741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI825274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                       셤
                                                                                                                                                            ò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                           / Woll type="mRNA" | Woll type="mRNA" | Woll type="mRNA" | Woll type="mRNA" | Woll type="mRNA" | Woll type="mRNA" | Woll type="mRNA" | Woll type="media" | Wissue type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type="media" | Woll type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGC-ACTGCTGAC 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 TCCACTCCAGGCAGCCCTCTCTCTCTCTACCGAATACGAACGCTTCTTCGCTACTGCTGACTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAG 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCATCTCACCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCTGGCCTGAGAG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCA 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: They'te Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov.f column: 05
Plate: LLAMI1407 row: f column: 05
High quality sequence stop: 911.
                                                                                                                                                                         рe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           casakcecesarcricicescarsassassassassassassassassas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCTGAAGGTGCTGCTCCTGCCACCTGCCGCAGCCCAAGGATTCGACTCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAACCTGGAAGGCAGAGACTACCTGCGTCTCCGTGCAACCCACGGCTGCCGGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

43.4%; Score 823.2; DB 4; Length 991;
Best Local Similarity 97.8%; Pred. No. 1.1e-194;
Matches 898; Conservative 0; Mismatches 13; Indels 7,
                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                         . .991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

d ઠે

ò a ò 셤 요

ò 엄 8

ò

g

ò a ò g ò g

ò g

```
/organism="Homo sapiens"
/mol_type="mRNA"
/do_tref="taxon:9606"
/clone="IMAGE:5170058"
/tissue_type="medulla"
/tissue_type="medulla"
/tissue_type="medulla"
/tissue_type="medulla"
/tissue_type="medulla"
/tobe="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 GCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCTCCACTCCAGGCAG 120
96 GCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCACTCCAGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 AGAGACTACCTGCCGTCTCCGTGCAACCCAGGCTGCCGGAATCCCACACTCGTCGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 GGACCAATATGAAAACCACGGCTTAGTGCCCGGTGCTGCTGCTCCAACCTCCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCACTTGCTCCCAACCACGTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36 ATCTICICGGGCCAIGAGGAAGCCAGCCGCIGGCTICCTICCTICACICCIGAAGGIGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         216 AGAGACTACCTGCCGTCTCCGTGCAACCCACGCTGCCGGAATCCCACACTCGTCCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                276 GGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTTGCTCCAACCTCCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTCACTACCGTTGCTCCAACCACGTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATGCCAAGAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421 GGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCATCTCACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 793.6; DB 4;
Pred. No. 2.6e-187;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.3%;
Matches 818; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              456
   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bp mRNA linear EST 04-OCT-2001
sapiens cDNA clone IMAGE:5170058 5',
                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                CACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGTTGT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 740
                                                                                                                                                CTCCTGAAGGTGCTGCTCCTGCCTCTGCCGCGCAGCCCAGGATTCGACTCAGGCC 141
                                                                                                                                                                                                                                                             rccacrccascasccrcrcrcrcraccsaaracsaacscrrcrrcscacrscract 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTCAGCAACAACGAGGAAGAGCTCCTACAATCCTCCTTGTCCTGGGAGGCCAGGAGCA 620
                                                                              83
                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                      CTCCTGAAGGTGCTGCTCCTGCCTCTGGCCCCTGCCGCAGCCCAGGATTCGACTCAGGCC
                                                                                                                                                                                                                      CCCACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGCAGGAAGAGGGCAGAAACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCAACCACGICTACTATGCCAAGAGTCCTGTGTTCCCAGCCAGTCTCTATTCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCGCCAGAGCACAAGGAGCAAGGAGTGGAGCACAGAGGAGCCGACACAAGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCC-GGAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCAGCAACAACGTCGAAGAGCTCCTACAATCCTCCTTGTCCTCGGAGGCCAGGAGCA
                                         Gaps
                                         ä
 Length 825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAGAGCCCAAGTATCACTCTGAATCTCTATCTTCTAACCCTTC 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTC 845
                                       Indels
                                       6
 DB 4;
Score 799.2; DB 4;
Pred. No. 1.1e-188;
0; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B1828365
603078309F1 NIH_MGC_119 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence. _ _ B1828365
B1828365.1 GI:15939915
42.2%;
98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                 al Similarity 98.8
815; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                     61
                                                                                                                                                                                                                        142
                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 801
Query Match
Best Local 8
                                                                        22
                                                                                                                                                82
                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
BI828365
                                                                                                   셤
                                                                                                                                                ઠ
                                                                                                                                                                        g
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                       ે
                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਠੇ
```

2

2;

Length 823; Indels 215

180 275 240 335 300 395 360 455 420 515

480 575

155

136

9

92

196 180 256 240 316 300 376

셤

ò

셤

ò ద ò a ò g

ò

```
77 correactecrassagaractracraceraceraceraceraceraceraceracera
                                                                                                                                                                                                                                           197 TGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGA
                                                                                                                                                                                                                                                                                                                                    ATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                            137 AGGCCCCCACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGACAGACTCAGAGCCCCAG-TTCACTCTGAATCTCTATCT-ACCCTTCCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCCCCCATCTCACCCCACTTCACAGTGACGAGACGCCAGACCTTCCAGCCCTGGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGACAGCACGGAAGGACAGGGCGACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGGCTCAGCAACGTGGAAGAGCTCCTACAATCCTCCTTGT-CCCTGGGAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCAAGCGCCAGAGCACAAGCAAGGAGCAAGGAGTGGAGCACACAGGAGCCGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAAAGCA-GGAAGAAGACAGGG-GACTAAGGAGGGACGGGAGGCTGTGTCTCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCCCGGGTACGAGA 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCCCGGGTACGAGA
                                    17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               794 1
                                                                                                                                                                                                                                                                                                                                                                                                  257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
BI520181
                                                                                                                        δ
                                                                                                                                                              음
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="Laxon:9606"

/clone="IMAGE:516070"

/tissue_type="medulla"

/lab_host="milloB"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NIH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 19"

/clone=lib="NiH_MGC | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
E 1 (Bases 1 to 834)
S 11 (Bases 1 to 834)
I Unpublished (1999)
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Plate: LLAM11417 row: n column: 07
High quality sequence stop: 854.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI826371
603076231F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5168070 5',
                                                       635
                                                                     CTTCACAGTGACAGAAGGCCAGACCTTCCAGCCCTGGGGCTCAGGAACAACGT 540
                                                                                                                                                                GCAGARACACGGAAGAGCAAGAAGAGGAACAGGAAGAGGAAAGCAGGAAAGCAGGAAGAGACA 755
                                                                                                                                                                                                                                                         815
                                           GGAAGAGCTCCTACAATCCTCCTTGTCCTGGGAGGCCAGGAGCAAGCGCCAGAAGCAAAA
                                                                                                                                                                                                                                                                                                                   Query Match
41.6%; Score 788; DB 4; Length 854;
Best Local Similarity 98.8%; Pred. No. 6.7e-186;
Matches 846; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 823
                                                                                                                                                                                                                                                                                                                                                                                                              TCACTCTGAATCTCTATCTT-AACCCTTCCTCTTTTGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACTCTGAATCTCTATCTTCTAAACCCTTCCTCTTTTTGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI826371.1 GI:15937921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . .854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                           576
                                                                                                                                      989
                                                                                                                                                                                                                            969
                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                     756
                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
```

FEATURES

BI826371

496 480 556 540 615 900 675 999 735 720 793 780

```
BI520181 827 bp mRNA linear EST 29-AUG-2001 603071429F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5163366 5', mRNA sequence.
BI520181.1 GI:15344973
                                                                                                                Homo sapiens
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

ů,

Gaps 5

```
/tissue type="medials"
/lab_host="DH10B"
/lab_host="DH10B"
/lab_host="DH10B"
/clone_lib="NH1MGC_119"
/note="Organ: brain; Vector: pCNV-SPORT6; Site_1: NotI;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NHMGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGGCCAAGGCCTGGAAGTAC 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1093 ATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACAC 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGICTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAG 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCAGCCTGCAGCGCCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCCCCTTG 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTT 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACG 1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAG 1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGT 1512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1513 TCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGA 1572
                                                                                               Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: Gapber Townstall nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Prayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://ange.lln.gov
Plate: LLAM1405 row: j column: 07
High quality sequence stop: 826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 ATGGAGGAGAATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 ATGTCTACCTGTGCCCTCTGTGACTTCTGCTTCTGAAGCTGGAGTGCCACTCAGAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 GCCAGCCTGCAGCGCCAACAATGCGACACTCCCACAAGACTCCCTTTGTCAGCCCGTTG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 CTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 TACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361 AAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGGCCAAGGCCTGGAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421 GATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGT
                      1 (bases 1 to 827)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 782.8; DB 4; Length 827;
Pred. No. 1.3e-184;
0; Mismatches 12; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .827
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5163366"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41.3%;
98.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 812; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
1632
                                                                                                                         CGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTAT 1692
                                                                                                                                                                                              TCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTT 1752
                                                                                                                                                                                                                                                                    TCAGGCTGCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGC 1812
                                                                                                                                                             099
                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                          TCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCCGCATGAGA 540
                                                                                       009
                                                                                                                                                                                                                       661 TCTGCCCACAAACCCAGCCCAAACTG-CCACGTACTCTATTGTTTTGAGACCCCATTGCTT
                                                                                                                                                CGATGGAGCCAGGAGTTCAGCCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGGTTAT
                                                      TGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTT
                                                                                      541 rererecagaargagaerracagredecreageceregecaaaagreaggaegregreerr
                                                                                                                                                                                                                                                                                                                                              1813 AACAGTCCCAGAGAGGCCACGGTGGGAGCTGCGCCCTCCTTAAAA 1858
                                                                                                                                                                                                                                                                                                                                                                                824
                                                                                                                                                                                                                                                                                                                                                                              780 AACAGTCCAAGAGGG-CACGGTGGGAGCTGGCCCTCCTTAAAGA
                      481
                                                                                                                           1633
                                                                                                                                                               601
                                                                                                                                                                                                1693
                                                                                                                                                                                                                                                                       1753
                                                                                  DP
                                                                                                                       ò
                                                                                                                                                     g
                                                                                                                                                                                   ð
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                             ð
                                                  8
```

completed: March 7, 2005, 19:45:25 he: 7505 secs

Search co Job time

THIS PAGE BLAWN (USSTIC,

(ب

s

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM nucleic - nucleic search, using sw model
                                                 a a
    14
15
16
17
18
                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                               1890.2
   768.4
612.2
610.6
604.2
471.8
471.8
339.8
337.2
282.4
                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                GenEmbl:*

1: gb ba:*

2: gb htg:*

3: gb om:*

4: gb ow:*

5: gb pat:*

9b pat:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*

9b pr:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  March 7, 2005, 08:35:27; Search time 8236 Seconds (without alignments) 11148.936 Million cell updates/sec
                                                                                                                                                                                                                                 Match Length
                                                                                                                                                                                                                                                                                                                                       6:
7:
8:
9:
10:
11:
11:
113:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4708233 seqs, 24227607955 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1895
1 gttagaggcggcttgtgtcc......tgttgatcttcaaaaaaaa 1895
                                                                                                                                                                                                                                              Query
               US-09-559-013E-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
  1284
56520
245880
516
522
507
                                                                                             1880
964
2299
1253
                                                                                                                                        1899
1886
1899
1892
1813
1841
                                                                                                                                                                                                                                  DB
                                                                                                        6 6 10
             BD268022
BC033010
BD192303
BD192303
BD192303
BD192303
BD192303
BD192402
BD139445
CQ722423
D MUSSP32B
D BC011079
D BC011079
D BC079212
AC135892
AC079387
HUMYP422A04
BD179034
BD179034
BD179034
    BD060281
                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9416466
BD268022 Proteases
BC033010 Homo sapi
AB051833 Homo sapi
BD192303 Secreted
BD192303 Secreted
BD192303 Secreted
BD196200 Sus scrofa
D17573 Mus musculu
D16200 Cavia porce
BD139445 Extended
CQ722423 Sequence
D17574 Mus musculu
BC011079 Mus musculu
BC079212 Rattus no
AC135892 Homo sapi
AC079387 Homo sapi
AF079387 Homo sapi
BD179034 Cancer as
BD179252 Cancer as
BD179252 Cancer as
                                                                                                                                                                                                                                Description
```

ი						O				ი	ი	ი			ი	a							ი		
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
82.6	83	83.2	83.2	83.2	83.2	84.2	84.2	84.8	84.8	85.2	86	87.4	87.4	87.4	87.4	106.8	124.4	124.4	258.8	258.8	258.8	269.6	271.4	274.2	282
4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	6	5.6	6.6	6.6	13.7	13.7	13.7	14.2	14.3	14.5	14.9
261474	211947	215724	187126	157152	124244	203115	194209	236468	185694	145678	199946	251756	194537	179737	168365	67573	128	128	316	316	316	658	391	166392	261384
2	10	2	10	10	10	N	10	N	N	10	10	10	10	N	10	N	σ	9	Ð	6	9	10	11	10	N
AC094196	AC107828	AC099902	AC113315	AC114679	AL929026	AC102574	AL671894	AC121887	AC145610	AC131771	AC105071	AC119801	AC139043	AC121552	AC131653	AC122760	BD073650	AX968632	BD111312	AX972593	AR415759	BC061122	G23540	AC134529	AC115415
AC094196 Rattus no	AC107828 Mus muscu	AC099902 Mus muscu	AC113315 Mus muscu	AC114679 Mus muscu	AL929026 Mouse DNA	AC102574 Mus muscu	AL671894 Mouse DNA	AC121887 Mus muscu	AC145610 Mus muscu	AC131771 Mus muscu	AC105071 Mus muscu	AC119801 Mus muscu	AC139043 Mus muscu	AC121552 Mus muscu	AC131653 Mus muscu	AC122760 Mus muscu	BD073650 5'EST of	AX968632 Sequence	BD111312 EST and e	AX972593 Sequence	AR415759 Sequence	BC061122 Mus muscu	G23540 human STS W	AC134529 Mus muscu	AC115415 Rattus no

## ALIGNMENTS

RESULT 1

Db 857 CCTTCCTTTTGCTCCCCGGTACGAGAGTGTAGAGTCTACTCCTATGATAATGGAGAAC 900 B57 CCTTCCTTTTTGCTCCCCGGGTACGAGAGTAGTAGTGTAGTGATAATGGAGAAC 900 B57 CCTTCCTTTTTGCTCCCCGGGTACGAGAAGTAGATTAGTCTACTCCTATGATAATGGAGAAC 916 DV 901 ATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAATGA	OY  1 CITACAGCICACTIVITETICACCAGACACCACCATICACACCACCATTCACACACACCACCACTACACACCACCAC	milarity 99.7%;
RESULT 2 BC033010 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE	B	
BC033010 BC033010 IMAGE:4822765), complete cds. BC033010 BC033010 BC033010.2 GI:34783873 MGC. Homo sapiens (human) M Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	1037 TIGCTISGNOCHAFTÓGAÍTÓGAÍANTÁICHCUCHAINICCICCACAGCAGA 1056 1081 GCCTIGAACTACATGGAGGAGGACACCCTTGGTTTCGGAAGTCGGTCTGGAAGTCGTTGACAGCCTT 1140 1097 GCCTIGAACTACATGGAGGAGGACACCCTTGGTTTCGGAAGTCGGTCTGACAGCCTT 1156 1141 GGCGGCGACACATGTCTACCTTGCACCTTGGTTTCGGAAGTCGGTCTTGACAGCCTT 1156 1157 GGCGCGCGACACATGTCTACCTTGCACCTCTGGACCTCTCGACACCTTGACCCTTT 1276 1261 TGCCACTCAGAGGCCAGCCTGCACCGGCAACAATGCGACACCACCACAAAGTCGGTCG	

8 망

```
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RS. Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S. F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R. F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Distchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M. F., Casavant, T.L.,
Scheetz, T. E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Butterfield, Y. S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov ( Series: IRAK Plate: 33 Row: e Column: 5
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 17999523.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.gov
NIH-MGC Project URL: http://mgc.nci.nih.gov
On Sep 16, 2003 this sequence version replaced gi:21542511.
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
CDNA Library Preparation: Michael J. Brownstein (NHGRI) &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA Library Preparation: Michael J. Brownstein (NHGRI) & Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (21-JUN-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 1899)
/translation="mrkpaagflpsllkvlllplapaaagdstgastpgsplspteye
RPFALLTPTWKAETTCRLRATHGCRNPTLVQLDQYENHGLVPDGAVCSNLPYASWFES
                                                                                                                                    /product="proacrosin binding protein sp32,
/protein_id="AAH33010.1"
/db_xref="GI:21542512"
                                                                                                                                                                                                                                                                                                                                /note="synonyms: SP32, OY-TES-1"
/db_xref="LocusID:84519"
/db_xref="MIM:608352"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                db_xref="MIM:608352"
                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="ACRBP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="MGC:26629 IMAGE:4822765"
/rissue_type="Testis"
/clone_lib="NIH_MGC_97"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                gene="ACRBP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="Vector:
                                                                                                                                                                                                                                             codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .1899
                                                                                                            _xref="LocusID:84519"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99 (26), 16899-16903 (2002)
                                                                                                                                                                                                          precursor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1890; Conserv
```

FCQFTHYRCSNHVYYAKRVLCSQPVSILSPNTLKEIEASAEVSPTTMTSPISPHFTVT
ERQTFOPWPERLSNNVEELLQSSLSLGGQEGAPEHKQEGGVEHRQEFQGEAKQEEGQK
QEQEEEQEEEGKQEEGGTKEGREAVSQLQTDS
GEQEEEQEEEGKQEEGGTGEGREAVSQLQTDS
STPMLMENIQELIRSAGEIDEMNEIYOENSYWRNQNEGSLLGLPHTEALLVLCYSIVE
NTCIITPTAKAWKYMEEEILGFGKSVCDSLGRRHMSTCALCDFCSLKLEQCHSEASLQ
RQQCDTSHKTPFVSPLLASQSLSIGNQVGSPESGRFYGLDLYGGLHMDFWCARLATKG CLQNETYSALSPGKSEDVVLRWSQEFSTLTLGQFG" CEDVRVSGWLQTEFLSFQDGDFPTKI CDTDYIQYPNYCSFKSQQCLMRNRNRKVSRMR

Conservative

0; Mismatches Score 1888.8; Pred. No. 0;

Indels Length

0, Gaps

0

99.7%;

BB 9;

4 AGAGGGGCTTGTGTCCCGGGACCCGGGCTGATTCTCCCGCCATGAGGAAGCCAGCC															
4 AGAGGGGGCTTTGTTCCCGGGAAGGCGGATCATGAGGAAGCCAGGCATGAGGAAGCCAGCC	Db Qy	QУ	ης γς γς	. DP 6A	Db Qy	D Q	B &	gy Qy	D Q	d dd	Qy dd	Qy db	Qy dd	D Qy	Db Qy
	44 TCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATC 9	84 TCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCT 8	24 CAGGAAGAGGAGGGAAAGCAAGAAGGAAGGACTAAGGAGGGACGGGAGGCTGTG 7	64 GAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAAACAGGAAGAGAGAGAAGA	04 CTGGGAGGCCAGGAGCAAGCCCAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAG 66 	44 CAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCC 60	84 CCCACCACGATGACCTCCCCCCATCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTC 54	24 CCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCA 48	64 TTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGTCCTGTGTTCCCAG 4	04 CCCGATGGTGCTGCTCCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAG 3	44 CACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTG 3	84 TTCTTCGCACTGCTGACCTCGAACCTGGAAGGCAGAGACTACCTGCCGTCCCGTGCGAACC 24	24 CAGGATTCGACTCAGGCCCCACTCCAGGCAGCCCTCTCTCT	GCTGGCTTCCTTCACTCCTGAAGGTGCTGCTCCTGGCTCTGGCACCTGCGGAGCC	AGAGGCGGCTTGTGTCCACGGGACGCCGGGCGGATCTTCTCCGGCCATGAGGAAGCCAGCC

```
RESULT 3
AB051833
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                             1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1204
                                                                                                                                         AB051833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                             CTTTACATAAAATGTTGATCTTCAAAAAAAA 1895
                                                                                                                                                                                                                                                                                                                                                  CTTTACATAAAATGTTGATCTTCAAAAAAAAA 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĠĠŦŦĠĠŔĠĊŔŔĊŔĠŦĊĊĊŔĠŔĠŔĠĠĠĊĊŔĊĠĠŦĠĠĠŔĠĊŦĠĊĠĊĊĊŦĊĊŦŦĸĸŔĸĠĸŦĠĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCCCTTAAAAGATGA 1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccarractricadactaccccciricadactricatatriacticadecccciactactactricatric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTACACATTTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĠĠĊĠŦĊŦÀŦŤĊŤĠĊĊĊĀĊĀĊĊĊĀĠĊĊĊĀĀĊĊŦĠĊĊĀĊĠŦŤĊŤĊŦĀŤŤĠŦŤŤŦĠĠāĠĀĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGTCTATTCTGCCCAACCCCAGCCCAACCTGCCCAACGTTCTCTATTGTTTTGAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĠŦŦĠŔĠĊŦŦĊĠŔŦĠĠŔĠĊĊŔĠŖŔĠŦŦĊŔĠĊŔĊĊŦŦĠŔĊŦĊŦŔĠĠĊĊŔĠŦŦĊĠĠŔŦĠŔĠĊŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cecareadarerere en adarea da certa cada en esta de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de certa de cada de cada de certa de cada de certa de cada de certa de cada de certa de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada de cada d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTTCCAGGATGGGGATTTCCCCTÁCCÁÁGATTTGTGÁCÁCÁGÁGTÁTÁTCCÁGTÁCCCÁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTTCCAGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĠĠĊĊĠĊŦŤŦŤĂĊĠĠĠĊŦĠĠĂŤŦŦĠŦĂĊĠĠŦĠĠĠĊŦĊĊĂĊĂŤĠĠĂĊŤŤĊŤĠĠŦĠŦĠĊĊĊĠĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCCCTTGCCTCGCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCA 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTCAGAGGCCAGCCTGCAGCGGCAACAATGCGACACGTCCCACAAGACTCCCTTTGTC 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cededacácárerenácererececrerereacerrerececreerreaaaecreaerec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGAAGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGG 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       regandrachregaedes de de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra del la contra del la contra del la contra del la contra del la contra de la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cregrected at the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          récháchágádalakédalakácichágelagichéchádaghágetédakádagageting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTACTGGAGAAACCAAAACCCTGGGAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTG 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATGAAATATATGATGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATGAATATATGATGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rgtteetreaaaageeageagtetetgatgagaaageeeaategaaagetgtee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rectrecciteceásas circiteca resea a conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conservado en conserva
                                                                                                                    1886
                                                                                                               ďď
                                                                                                               mRNA
                                                                                                    linear
                                                                               PRI 15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                    문
                                                                                                                                               Ş
                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity Matches 1886; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                    181
                                                          181
                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
ĊĠĊŦŦĊŦŦĊĠĊŔĊŦĠĊŦĠŔĊŦĊĊŔŔĊĊŦĠĠŔŔĠĠĊŔĠŔĠŔĊŦŔĊĊŦĠĊĊĠŦĊŦĊĊĠŦĠĊŔ
                                                                    deceaddarredaereaddeeceeaereeaddeaddeecererereeraecdaaraedaa
                                                                                                                                                                                                                                                        GCCGCTGGCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTAGAGGCGGCTTGTGTCCACGGGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                        decederéderrécerrédere de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la conservation de la con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTAGAGGCGGCTTGTGTCCACGGGACGCGGCGGATCTTCTCCCGGCCATGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ono, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11248070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.5%;
ilarity 100.0%;
Conservative
```

Score 1886; D; Pred. No. 0; 0; Mismatches

DB 9; °,

Length 1886; Indels

0;

Gaps

0

240 240

180 180 120 120 60 ۰,

```
Ono,T. and Nakayama,E.

Direct Submission

Direct Submitted (27-NOV-2000) Toshiro Ono, Okayama University Medical School, Department of Immunology; 2-5-1 Shikata-cho, Okayama, Okayama 700-8558, Japan (B-mail:onotomed.okayama-u.ac.jp, Tel:81-86-235-7192, Fax:81-86-235-7193)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identification of proacrosin binding protein sp32 precursor as human cancer/testis antigen Proc. Natl. Acad. Sci. U.S.A. 98 (6), 3282-3287 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ono,T., Kurashige,T., Harada,N., Noguchi,Y., Aoe,M., Nakamura,S., Higashi,T., Hiraki,A., 101d,L.J. and Nakayama,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AB051833.1 GI:13366085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens mRNA for proacrosin binding protein sp32 precursor, complete cds.
AB051833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 1886)
/codon_start=1
/codon_start=1
/product="proacrosin binding protein sp32 precursor"
/product="proacrosin binding protein sp32 precursor"
/protein_id="staba3938s.1"
/b_xref="G1:13366086"
/translation="markpaagfipsil.kvull.plapaaaQDSTQapTpGspl.spTeys
Refall.TpTwkAstTCRLapTmGCRNPTLVQLDQYENGLIVPDGaVCSNLPYASWFES
FCQFTHYRCSNHVYYAKRVLCSQPVSILSPNTLKEIEASASVSpTTYMTSPISPHFTVT
REQERECGESKQCDECGTSCEGRAVSQLQTDSSPKHROEGFCDHKQEEGQK
STPMINENIOBLIRSAGEIDEMNEIYDENSYMRNQNPGSFLOLPHFEALLULCYSIVS
STPMINENIOBLIRSAGEIDEMNEIYDENSYMRNQNPGSFLOLPHFEALLULCYSIVS
RQQCDTSHKTPEVSPLLASGISIGNQVGSPESGRRHMSTCALCDFCSLKLEQCHSEASIQ
CEDVRYSGMLOTEFLSFQDGDFPTKICDTDYIQYPNYCSFKSQQCLMRNRNRKYSRMR
CLQNETYSALSPGKSEDVVLRWSQEFSTLTLGQFG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /map="12p12-p13"
/tissue_type="testis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        country="Japan:Okayama"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ne="sp32"
.1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .1886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Saika,T., Niikawa
Wada,H., Kumon,H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Niikawa, N.,
```

~)

Ś 망 Ş Вb 5

1141 GGGGGGACACATGTCTACCTGTGCCCTCTGTGACTTCTGTAGACTTGAAGCTGAGCAG 1200	961 AACTCCTACTGGAGAACCAAACCCTGGCGCTCCTCCACGCTGCCCCACACAGGCC 1020	841 CCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAAC 900	GTGTCTCAGCTGCAGACACACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAAC	21 GAACAGGAAGAGGAAGCAGGAAGAAGAACACCGCACTTAAGGAGGAGGACGCT 7	GAGCCGACACAAGAACACAAGCACCAAGAAGAAGAAGAAG		GTGACAGAACGCCAGACC 54 	361 CAGTTCACTACCGTTGCTCCAACCACTCTACTATGCCAAGAGAGTCCTGTGTTCC 420 421 CAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGAGAGATAGAAGCTTCAGCTGAAGTC 480	01 GTGCCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 36 61 CAGTTCACTCACTACCGTTGCTCCAACCACGTCTACTATGCCAAGAGAGAG	01 GTGCCCGATGGTGCTGCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGC 3	241 ACCCACGGCTGCCGGAATCCCACACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTA 300 
·											
FEATURES SOURCE	ORGANISI REFERENCE AUTHORS TITLE JOURNAL COMMENT	RESULT 4 BD192303 LOCUS DEFINITION ACCESSION VERSION VERSION KEYWORDS SOURCE	Qy Db	р <i>Q</i>	D Qy	Qy Db	& B &	Qy Db	<b>д Q</b>	Qy Db.	Oy db
	unidentified unclassified. 1 (bases 1 to 1899) 1 (bases 1 to 1899) 1 (cob, K., Mccoy, J.M., Lavallie, E.R., Racie, L.A., Spaulding, V., Agostino, M.J., Howes, S.H. and Fechte Secreted proteins and polynucleotides encoding the Patent: JF 2002513294-A 6 08-MAY-2002; GENETICS INSTITUTE INC PN JF 2002513294-A/6 PD 08-MAY-2002 PF 18-JUN-1998 JF 1999504681		1861 TGACTTTACATAAATGTTGATCTTC 1886 	1801 TTGGGTTGGAGCAACAGTCCCAGAGAGGGCCACGGTGGGAGCTGCGCCCCCTTAAAAGA 1860 	1741 ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1800 1741 ACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCC 1800	1621 GACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGATGA 1680 1681 GCTGGCGTCTATTCTGCCCACACCCCAGGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG 1740 1681 GCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAG 1740	1561 TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG 1620 1561 TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAG 1620 1561 TCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGGCCTGAGCCCTGGCAAAAGTGAG 1620 1621 GACGTTGTGCTTCGATGAGCCAGGAGCACCTTGAGCTCTGAGCCAGTTCGGATGA 1680	1501 CCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTG 1560 	1441 CTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTAC 1500	1381 CGGCTTGCCACGAAAGGCTGTGAAGATGTCCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC 1440 1381 CGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTC 1440	1321 TCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCC 1380

ORIGIN

841 TETTTTGCTCCCGGGTAGGAGAATAGATCAAGGAGACATCCAG 906 907 GAGCTCATTCGATCCAGGGAAATAGAAATGAAATAATCGAGAACATCCAG 900 907 GAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAA	61 destrictine cereanades retreered controlled to the controlled t	98.0%; Score 1856.4; DB 6; Length 1899; servative 4; Mismatches 5; Indels 2; Gaps ITGTGTCCACGGGACGCGGGCGGATCTTCTCCCGGCCATGAGGAAGCCAGCC
RESULT 5 BD136402 LOCUS BD136402 BD136402 BD136402 DEFINITION 95 human secretory proteins. VERSION VERSION KEYWORDS SOURCE Homo sapiens (human) ORGANISM Homo sapiens (human) ORGANISM Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	10 10 10 10 10 10 10 10 10 10 10 10 10 1	Qy 1027 GTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGG 1086

B & B & B	ор Оу	D Q D Q	ORIGIN Query Ma Best Loc Matches	FEATURES source			REFERENCE AUTHORS TITLE JOURNAL COMMENT
264 ACTCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTCGCTC	144 CACTCCAGGCAGCCCTCTCTCTCTCCTACCGAATACGAACGCTTCTTCGGACTGCTGACTCC 203	24 GGACGCGGGCGGATCTTCTCCGGCCATGAGGAAGCCAGCC	/OLYGALLENIE FRONCE BALLENIE /MOI_TYPE="Genomic DNA" /db_xref="taxon:9606" /db_xref="taxon:9606"  Match 95.6%; Score 1811.2; DB 6; Length 1892; Local Similarity 99.4%; Pred. No. 0;	566, PC C12N15/00,A61K37/02,C12N5/00 CC 95 human secretory proteins FH Key Location/Qualifiers FT source 1.1892 FT Location/Qualifiers 1.1892 1.1892	PI PLING FENG,  PI PLING FENG,  PI DANIEL R SOPPET, YING FEI WEI, GREGORY A ENDRESS, ROXANNE D DUAN,  PI HLA KYAM,  PI REINHARD BENER, DAVID W LAFLEUR, HENRIK S OLSEN, YANGGU SHI, PAUL  PI A MOORE  PC C12N15/09, A61K38/00, A61K48/00, A61P43/00, C07K14/47, C07K16/18,  PC C12N1/15,  PC C12N1/15,  CC C12N1/19, C12N1/21, C12N5/10, C12P21/02, C12O1/68, G01N33/53, G01N33/ PC	B-MAR-2002 B-MAR-1999 JP 2000536733 J-MAR-1998 US 60/078566,19-MAR-1998 US 60/078573,19-MAR-1998 US 60/078579,19-MAR-1998 US 60/078579,19-MAR-1998 US 60/078591,19-MAR-1998 US 60/07853,01-APR-1998 US 60/07853,01-APR-1998 US 60/07853,01-APR-1998 US 60/080312,01-APR-1998 UN JIAN NI, CRAIG A ROSEN, GUO YU, PAUL E YOUNG,	1 (b Ruben Soppe Lafle 95 hu Paten HUMAN OS
						<u></u>	
8 8 8 8 8 8 8	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	B & B &	5 6 6 6	Db Qy Db	\$ \$ \$ \$ \$ \$ \$	Q Q D	8 8 8 8
1331 TTTGTACGGTCGCCCCACATGGACTTCTGGTGTCCCCGCCTTGCCACGACGGATGGCTTGCACAACGCTTGCCACGACTCCACACTCACACTCACACTCCACACACTCCACACACTCCACACACTCCACACACTCCACACACTCCACACACTCCACACACTCCACACACACTCCACACACACACACACACACACACACACACACACACACAC	1224 GCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGCTCACCACCCCTTGCTTG		CCCIGGAGCTICCIGCAGCIGCCCCAACAGAGCCTIGCTGGTGCTGTGCT	ACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGC	GGAAGAAGGACAGGGGACTAAGGAGGGGACGGGAGGCTGTGTCTCAGCTGCAGACAGA		444 TAACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCACCACGATGACCTCCCC 503

29;

60

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
PIGACRSN
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baba,T.

Direct Submission

Submitted (06-MAY-1993) Tadashi Baba, University of Tsukuba,
Submitted (06-MAY-1993) Tadashi Baba, University of Tsukuba,
Institute of Applied Biochemistry; Tennohdai 1-1-1, Tsukuba Science
City, Ibaraki 305, Japan (Tel:81-298-53-6632, Fax:81-298-53-6632)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vericultur, Bukaryota; Mutheria; Cetartiodactyla; Suina; Suidae; Sus. 1 (bases 1 to 1813)
Baba, T., Nida, Y., Michikawa, Y., Kashiwabara, S., Kodaira, K., Takenaka, M., Kohno, N., Gerton, G.L. and Arai, Y.
An acrosomal protein, sp32, in mammalian sperm is a binding specific for two proacrosins and an acrosin intermediate J. Biol. Chem. 269 (13), 10133-10140 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIGACRSN
Sus scrof
D16200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sus scrofa (pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8144514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D16200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGGGCCACGGTGGGAGCTGCGCCCCTCCTTAAAAGATGACTTTACATAAAATGTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cecadeceaacerdeceacerrereratrigatiridadaececatrigerreadgerdece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCAGCCCAACCTGCCCACGTTCTCTATTGTTTTGAGACCCCATTGCTTTCAGGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ridada crita ca de receir de de constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               scrofa mRNA for
                              /translation="Qlaagsllsllkvlllplapapagdansastpgsplspteyerpealltpyrkspteyerpealltpyrksptgyrpealltpyrkspteyerpealltpyrksptgreeppyrcshltpyrksptgreeppyrcshltpyrksptgreeppysilspnslkevdisspvpityrmyspvsshitatgrefpealltrodeschedeggebedeegeepealltrodeggebedeegeeppyrcshltpyrgsptyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmyspvstyrmy
                                                                                                                                                                                                                                    /codon start=3
/product="sp32 precursor"
/protein_id="BAA03737.1"
/db_xref="GI:475021"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcagcaccitigacictaggicagriteggatgagciggegictarictgeeeacac
                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="testis
/note="clones PN[12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="nuxua
/db_xref="taxon:9823"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Sus scrofa"
(mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:475020
                                                                                                                                                                                                                                                                                                                                                                              .1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _type="sperm"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1895
                                                                                                                                                                                                                                                                                                                                                                                                                                       type="testis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       precursor,
                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         đđ
                                                                                                                                                                                                                                                                                                                                                                                                  22] "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
l cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi; Sus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1569
                                                                                                                  밁
                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 1514; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sig_peptide
mat_peptide
                                                         893
                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                          649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                       713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          53
TGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATGAAATGAAATAT
                                                                                                 ĊŦŦĊĊĀĀĊĊĊĊŦŦĊŦĊĊŦŦĊĀĊŦĊĊĠĊĠĠĠŦĠĊĠĠĠĀĠĠŦĠĠĀĠŦĊĠĀĊĊĊĊĠĀŦĠĀŤĠĀ
                                                                                                                                             CTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAA
                                                                                                                                                                                                                                           TGAGGCAATGTCTGGGCTACAGGCAGACTCAGA
                                                                                                                                                                                                                                                                  GGGAGGCTGTGTCTCAGCTGCAGACAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTAT
                                                                                                                                                                                                                                                                                                                                                      AAGAGGAGGAGCAGGAGGAGGAGGAAGCAGGAAGAAGGACAGGGCACCGAAGAGTCGC
                                                                                                                                                                                                                                                                                                                                                                                               AAGAAGAGGAACAGGAAGAGGAGGGAAAGAAGAAGAAGACAGGGACTAAGGAGGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCCTTGTCCCTGGGAGGCCAAGGAGCAAGGCACAAGCAGAGCAGAGCAAGGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCACAGGCAGGAGCCGACACAAGAACACGAGGCAGGAAGAGGGGCCAGAAACAGGAAGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCCTTGTCCCTGGGCGGCCAGGAGCAGGGAGCACAAGCA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAGGTCTTCCAGCCCTGGCCCGAGCGGCTCAACAACAACGTGGAGGAGCTGCTACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAGACCTTCCAGCCTGGCCTGAGAGGCTCAGCAACGACGTGGAAGAGGTCCTACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGTTCCCAGCCAGTCTCTATTCTCTCACCTAACACTCTCAAGGAGATAGAAGCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAAGTCTCACCACCACGATGACCTCCCCCATCTCACCCCACTTCACACGTGACAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGCTCCCAGCCTGTCTCAATCCTCTCAACTCTCTCAAGGAGGTGGACACTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTCTGCCAGTTCACTCACCTACCGTTGCTCCAAGCACGTCTACTATGCCAAGAGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGCCTGGTGCCGGACGCGCGCTGTCTGCTCCGACCTCCCTTATGCCTCCTGGTTCGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCGGGCCACCCACGGCTGCCGGAACCCCACCCTCCTCCAGCTGGACCAGTATGAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCGTGCAACCCACGGCTGCCGGAATCCCCACACTCGTCCAGCTGGACCAATATGAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATACGAACGCTTCTTCGCACTGCTGACTCCAACCTGGAAGGCAGAGACTACCTGCCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                deseccia se de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta del comparta del comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta del la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta de la comparta del la comparta de la comparta de la comparta del la comparta de la comparta de la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta del la comparta 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTATGAGCGCTTCTTCGCACTGCTGACCCCAACCTGGAAGGCAGAGACTACCTGCCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGCTCGCCGCCGCCCCTCTCTCTCTCTCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAAGCCAGCCGCTGGCTTCCCTCACTCCTGAAGGTGCTGCTCCTGCCTCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          804. .1613
/product="sp32"
1617. .1813
1796. .1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ×1.
804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PTAKAMQYLEDETLGFGKSVCDSLGRRHLAACSLCDFCSLKLEQCHSETNLQRQQCDNSHKTPFISPLASQSMSIGTQIGTLKSGGRFYGLDLYGGLRMDFWCARLATKGCEDNRVASWLQTEFLSFQQDGDFFKLCTOTEFYQYPNYCAFKSQQCMTNNRDRKVSRMRCLQNETYTVLTQAKSEDLVLRWSQEFSTLTLGQAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1258; DB
Pred. No. 0;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
```

ន់

652 588

540 592

532 480

420 472 360 412

352 300

240

180 232 120

768

708

Craniata; Vertebrata; I Sciurognathi; Muridae;

Euteleostomi; ; Murinae; Mus.

of.

RNA

for

mammalian

spern

```
1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1369
                                                                                                                                                                                                                                                                                1667
                                                                                                                                                                                                                                                                                                                                                   1609
                                                                                                                                                                                                                                                                                                                                                                                   1673
                                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1013
                                                                                                                                                                           1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     829
 MUSSP32A
Mus musculus cds.
D17573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGGCCTTGCTGGTGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCA
                                                                                                                                                                                                                                                                                                                                                                   TCGGATGAGCTGGCGTCTATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCCTTGGGCGGCGACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGC
                                                                                                                                                                                                                             ACATTTCCTTGGGTTGGAGCAACAGTCCCAGAGAGGG----GCCACGGTGGGAGCTGCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGTGAGGACGTTGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAAGGTGTCCCGCATGAGATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCAGTACCCGAACTACTGTGCCTTCAAAAGCCAGCAGTGCATGATGAGAAACCGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGTACCCAAACTACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAGTTCCTCAGCTTCCAGGATGGGGACTTCCCCCACCAAGATTTGTGACACAGAATACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCCAAGGCCTGGAAGTACATGGAGGAGGAGATCCTTGGTTTTCGGGAAGTCGGTCTGTG
                                                                                                                                          CACCTTAAAGGATGTCTTTACATAAAGTGTTTATTTTC
                                                                                                                                                                     CTCCTTAAAAGATGACTTTACATAAAATGTTGATCTTC 1886
                                                                                                                                                                                                                                                                            GCTGTTGGACCCCAGGCTTCCCCTTCTGGC----CTGAGTCTCTTACCCGGCTCCGA---
                                                                                                                                                                                                                                                                                                               GTTTTGAGACCCCATTGCTTTCAGGCTGCCCCTTCTGGGTCTGTTACTCGGCCCCTACTC
                                                                                                                                                                                                                                                                                                                                               CTGGATGAGCTGGACTCCATCTTGTCCCCACCCCGGCCC--CCCTTCCACACTCTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGTGAGGACCTCGTGCTTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTCGGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAAGGTGTCTCGCATGCGATGTCTGCAGAATGAGACGTACACCGTCCTGACCCAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGAGTTCCTTAGCTTCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATA 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTGCGCCCGGCTGGCTACCAAGGGCTGCGAAGACAACCGAGTGGCCAGCTGGCTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTGTGCCCGGCTTGCCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCTAAAATCGGGCCGCTTCTACGGGCTGGATTTGTACGGCGGGCTCCGCATGGACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCAGAATCAGGCCGCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCCCTTCATCAGCCCCCTGCTGGCATCCCAGAGCATGTCCATTGGCACCCAGATAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCCTTTGTCAGCCCCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAGCAGTGCCACTCAGAGACCAACCTGCAGCGGCAGCAGTGTGACAACTCCCACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAGCAGTGCCACTCAGAGGCCAGCCTGCAGCGCCAAAATGCGACACCTCCCACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGCCTTGGGCGGCGACACCTCGCTGCATGTTCCCTCTGTGACTTCTGCTCCCTGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCCAAGGCCTGGCAGTACCTGGAGGATGAGACCCTTTGGTTTCGGGAAGTCGGTCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TEGACECCTTECTECTECTATTCGATTGTGGAGAACACCTGCGTCATAACCCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAGGAAGAGAACATCTGGAGAGCCCAAAGCCCCGGCAGCCTCCTGCAGCTGCCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGATGAGAACTCCTACTGGAGAAACCCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAGAACATCCAGGAGCTCATCCGATCCGCCCAGGAAATGGATGAGATGGGTGATGTCT
                                  ap32
                                     mRNA
                                1841 bp mRNA linear ROD 04-FEB-
for proacrosin-binding protein, complete
                                                                                                                                         1813
                                                    ROD 04-FEB-2003
                                                                                                                                                                                                                                            1848
                                                                                                                                                                                                                                                                              1719
                                                                                                                                                                                                                                                                                                               1792
                                                                                                                                                                                                                                                                                                                                                 1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1012
                                                                                                                                                                                                                                                                                                                                                                                                                     1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL REFERENCE
                  S
                                                    뮹
                                                                                  Ś
                                                                                                                        멼
                                                                                                                                                  Ś
                                                                                                                                                                                        밁
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 1422; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                      3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SdC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                   266
                                                    190
                                                                                      206
                                                                                                                        130
                                                                                                                                                       146
                                                                                                                                                                                         73
                                                                                                                                                                                                                            98
                                                                                                                                                                                                                                                          13
                                                                                                                                                                                                                                                                                             26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (10-SEP-1993) Tadashi Baba, University of Tsukuba, Institute of Applied Biochemistry; 1-1-1 Tennohdai, Tsukuba, Ibaraki 305, Japan (Tel:81-298-53-6632, Fax:81-298-53-6632)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rodent-specific alternative proacrosin-binding protein, uppublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D17573.1
                                                                                                                                                                                                                                                                              TCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTCCA
                                                                        CCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACAC
                                                                                                                       CTCCAGGCAGCCCTCTCTCGCCACTGAGTATGAACGCTTCTTCGCCCTGCTGACCCCAA
                                                                                                                                                  CTCCAGGCAGCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAA
                                                                                                                                                                                                                          TGAAGGTGCTGCTGCCTGCCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCA
                                                                                                                                                                                                                                                            CCTGGAAGGCAGACCACCTGCCGCCTCCGTGCCACCGCCTGCCGGAACCCCACTC
                                                                                                                                                                                         TGGAAGTGCTGCTCCTGCCTGGAACACCTCTTTCCGCTGAGGAAT---CTCCAGCCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 1841)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               musculus (house
                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NERYNVLSLAKSEEVILRWSQEFSTLAIGQFG" 1659. .1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="proacrosin-binding
/protein_id="BAA04498.1"
/db_xref="GI:516784"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cell_type="male germ cell"
/tissue_type="testis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Mus musculus"
/mol type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="testis"
/note="clones MN1 and MN11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /strain="ddy"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 to 1841)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:516783
                                                                                                                                                                                                                                                                                                                                                                                                                  'gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .1658
                                                                                                                                                                                                                                                                                                                                               59.5%;
77.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mouse)
                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                                                                                                                                                                                                                             Score 1128.2; DB 1
Pred. No. 1.9e-303;
0; Mismatches 398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        splicing
sp32
```

protein"

맑

S

S

밁 S 밁 á Ş

맑 Ś S

밁

밁

밁

RESULT 7 MUSSP32A LOCUS

DEFINITION

ACCESSION

S 밁 δ 밁 S 밁 S 밁 Ś 밁 S 뫄 S 밁 S 밁

398; DB 10;

Indels

15;

Gaps

189

205 129

325 249 265 145

72 85 Length 1841;

밁 Ś

```
1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                               AAATGTĀČGGĀGĀGĀCTCAGĆTCAĞĀGTTĊTĞGTĞCAAČČĞĞCTTĞCTĀTĞĀĀGĞĞCTĞTĞ
                                                                       ATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTGCCACGAAAGGCTGTG
                                                                                                                                            AGAGCATATCCACGGGCAACCAGGCGAGGATCCCCAGATAAAGGACGATTTGCTGGGCTAG
                                                                                                                                                                                        AGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCTTTTACGGGCTGG
                                                                                                                                                                                                                                                            TĠĊĠĊĊĀĠŖĀĠŦĠŦĠĀĊĠĊŦŤĊĊĊĀĊĀĀĞĀŦŖĊĊĊŦŤĊŖŦĊŖĠĊĊĊŤŤĠĊŤĊŦĊŖĠĊĊĊ
                                                                                                                                                                                                                                                                                               GTCCCCTCTGTGCATTCTGCTCCCTGAAGCTGGAGCAGTGCCACAGTGAAGCCAGTGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                        GTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAGAGGCCAGCCTGC 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATCCTTGGCTTCGGGGATTCGGTGTGTGACAATCTCGGAAGGCGÁCACACAGCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGCGACACATGTCTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGAAGTACATGGAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 géactigacadectica de adectige con caracidades de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGGTGCTGGTGCTATTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATGGĀGĀĀTĀCCTGCĀCCĀTGĀCTCCCĀCĀGGCCĀĀGGCCTGGĀGGCTĀCĀTGGĀGGĀGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCAGGĀĀĀTGGĀTGĀĀTGĀĀTGĀĀCTGTĀTGĀTGĀ-----ĊTCCTGGĀĞĀĀGCCÄĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAGGAAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCGAGAGGTGGAGTĊTGCTCCATTGATGATGAAGAATATCCAGGAGCTCATTCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAGCCCAAGTTTCAATCCCAGTCACTGTCTTCCAACCCGTCCTTCTTCACTCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAGCCCAAGTITCACTCTGAATCTCTATCTTATCCTCTTTTTGCTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGAAGAGGGCAGAAACAGGAAGAGGC---AAGAAGAGGAACAGGAAGAAGAGGAAGAGGAAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGAĀGAGGGGCĀGGĠGAĊAGĀĠĠCĠĠĠŦĊŦĠĠĀĠŦĊĀĠŦĠŤĊCĀGĠĊŤĠĊĀĠŢĊĀĠĀĊŤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGĀĀĠĀAGCĠĊĀĠĠĀGĊĀĀĠĀĀĠĀĠĊAGGĀĀĠĀĀĢĀĀĠĀĀĠĀĀĠĠĀĠĠĀĀĠĊĊĀĀĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGTČGGÁGAČCAĠGCĆÁ---GĠAĠCÁĠĊÁĊÁAĠĆÁĠĠÁĠČAĠÁTCĊÁÁĠÁÁĊÁTÁÁĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a caacaa cerega a cerecia de la composição de la composição de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la casa de la 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGTGTĊĊĊĀTGCĊĀĊĀĠCCĀĊĀĠĀĀĊĀĊCĀĠĠĊĊŤŤĊĊĀĠĊĊŤĠĠĠĊŤĠĀĠĊĠĠĊŤĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCCTGGCCTGAGAGGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACTCTCĂĂĠĠĂĠĠŦĠĠĀĠŦĊŦŤĊĀĠĊĄĠĀĀĠŦŦĊĊŦĊĊĠĊŦŢĊĊĀŤĠĀĊĊĄĊĊĊĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCATOTOTACTATOCCAAGAGGGTCCGGTGCTCCCAGCCGTCTCCATCCTATCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCTCCCTTÀTGCTTCCTGGTTTGÀGTCCTTCTGCCÀGTTTGCTCAGTÀTCGTTGCTCCÀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGTTCAGTTGGATCAATATGAAAACCACGGATTGGTACCAGATGGTGCTGTCTGCTCCG
                               1380
                                                                                    1402
                                                                                                                                               1320
                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
GPIACRSN
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                       5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                Submitted (06-MAY-1993) Tadashi Baba, University of Tsukuba, Institute of Applied Biochemistry; Tennohdai 1-1-1, Tsukuba Science City, Ibaraki 305, Japan (Tel:81-298-53-6632, Fax:81-298-53-6632)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baba, T., Niida, Y., Michikawa, Y., Kashiwabara, S., Kodaira, K., Takenaka, M., Kohno, N., Gerton, G.L. and Arai, Y.
An acrosomal protein, 5932, in mammalian sperm is a binding specific for two proacrosins and an acrosin intermediate J. Biol. Chem. 269 (13), 10133-10140 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cavia porcellus (domestic guinea
Cavia porcellus
Eukaryota; Metazoa; Chordata; Cra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GPIACRSN
Cavia por
D16203
D16203.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAGGTGCATGATGGGAGCTCCGAGTGCCTTGAA 1835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGGGCCACGGTGGGAGCTGCGCCCTCCTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCATGGGGCCTCCTCCCTGGCCCCTACTTGCATTTTCTTTGGGTTGGGAGAACAGTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCTGGGTCTGTTACTCGGCCCCTACTCACATTTCCTTGGGTTGGAGCAACAGTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 1880)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cccaeccaaccieccacciriciatitatitatitaeacacccarificiitacacciec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cccagcrcraccrrdcrccarcgcrcrcagacracarcrgrcagrraggrriccaggccgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGAGTTTAGCACTTTGGCTATAGGCCAGTTTGGATGAGCTGAGGTCTGTGTCCCCCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCTATTCTGCCCACA 1702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGCTTCGATGGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGAGGTACAACGTGCTAAGCCTGGCTAAGAGCGAAGAGGTGATCCTTCGATGGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCAGCAGTGCCTGCTGAGAAACCAGAACAGAAAGATGTCCCGCATGAGGTGTATGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAGGTGTCCCGCATGAGATGTCTGCAGA 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCCACCAAGATTTGTGACACAAACTATATCCAGTACCCAAACTACTGTTCCTTCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACTACTGTTCCTTCAAAA 1522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aagargaccgagrerecaacregerecaagergagricerragerreceaggaggggggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCTTCCAGGATGGGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      porcellus mRNA
50. .1681
/codon_start=1
/product="sp32 |
                                                                                                                            pig"
                                                                                                                                         /tissue_type="testis"
/note="clones GN[1, 2
                                                                                                                                                                                                                                                      organism="Cavia porcellus"
|mol_type="mRNA"
|db_xref="taxon:10141"
                                                                                                                                                                                                          sex="male"
cell_type="sperm"
                                                                                                                                                                                                                                                                                                                                                          . .1880
                                                                                 . 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:474969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1880 bp mRNA 1 for sp32, complete cds.
      precursor"
                                                                                                                                               ρ
                                                                                                                                               Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pig)
                                                                                                                                               σı
                                                                                                                                               and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1857
                                                                                                                                         10]~common
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
```

ROD

28-JAN-2003

1800 1822

1762 1680 1642 1560

1500

1440 1462

1620

protein

Ś 밁

961

닭 S 뭐 Ś 밁 Ś 밁 Ś 밁 Ş 밁 á 문 Ś 밁 Ś 밁 Ś 밁 Ś В

S 뭐 δ 8 S 밁 Ş 당 Ś 용 ş В Ś

1261 1283 1201

name:

guinea

```
polyA_signal ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1377; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sig_peptide
mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3'UTR
                                                                                                           621
                                                                                                                                        620
                                                                                                                                                                    561
                                                                                                                                                                                                  560
                                                                                                                                                                                                                                501
                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                           441
                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                    737
                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAGCAGGAAGAAGGACAGGGGACTAAGGA-----GGGACGGGAAGCTGTGTCTCAGC
                                                                                                                                                                  CCACACTCGTCCAGCTGGACCAATATGAAAAACCACGGCTTAGTGCCCGATGGTGCTGTCT
                                                                                                                        AAGCGCCAGAGCACAAGCAGGAGCAAGGA---GTGGAGCACGAGGCAGGAGCAGGAGCAGAAG
                                                                                                                                                                                  GGCTCAGCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCCAGGAGC
                                                                                                                                                                                                                                                                                        GCTCCAACCACGTCTACTACGCCAAGAGGGTCAGGTGCTCCCAGCCGGTCTCCATCCTGT
                                                                                                                                                                                                                                                                                                                                                                             GCTCCGACCTCCCTTATGCCTCCTGGTTCGAGTCCTTCTGCCAGTTCTCTCAGTACCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCCAACCTCCCTTATGCCTCCTGGTTTGAGTCTTTCTGCCAGTTCACTACCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAACCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĊTĊĊTAĊŤĊĊAĠĠĊAĠŦĊĊĊĊŤĊŤĊĊĊĊĊAĊĊĠĀAŤATĠĀGĊĠĊŤŤĊŤŤĊĠĊCĊŤĠĊŤĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCCCACTCCAGGCAGCCCTCTCTCTCTCTACCGAATACGAACGCTTCTTCGCACTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTGCTGAGGGTGCTGCTCCTGCCTCTGGGACCTGCTCTCGCGCAGGACTCTCCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACTCCTGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGG
                                               AAGCGGCTGGTCATAAGCAGGAGCAAGGACAGGAGCAGCAGGATCCGACCCAGG
                                                                                                                                                                                                                               CACCCGTCACATCCACATCAAAGCCACAGAGCGACAGTCGTTCCAGGCCTGGCCTGAGC
                                                                                                                                                                                                                                                     CCCCCATCTCACCCCACCTTCACAGTGACAGAACGCCCAGACCTTCCAGCCCTGGCCCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCACCATCGTTCAGCTGGACCAGTATGAGAACCACGGCCTGGTGCCCGACGGCGCTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCCACCTGGAAGGCAGAGACCACCTGCCGCCTCCGCGCTACCCACGGCTGCAGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59.4%; ilarity 80.2%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /protein_id="BAA03740.1"

/db_xref="GI:474970"

/db_xref="GI:474970"

/translation="MGQPAAGSILTLLRVLLLPLGPALAQDSPSAPTPGSPLSPTEYE
/translation="MGQPAAGSILTLLRVLLDQYENHGLVPDGAVCSDLEYASWEES
FCQFSQYRCSNHVYYAKRVRCSQDPVSILSVNSFKELESSPEVEVSPTTMTSPVTSHIKAT
FRQSFQAWPERLSNNVEELLQSSLSLAGQEQAGAGKQEQQEQHKQDPTQEHKQDDGQ
EQEBGEEQEBEEKQBEGQSVEDMLGRVGRAGLKIGSEPKPQSLGLSSDHHSFTARVR
DVDSAPMMIENIQELIQSAQEMEEMYBEDAYWRSQNHGSLLQLPHKEALLVLCYSIVM
NSCVMTPSAKAWKYLEBETFGFGXSVCDNLGRHHMALCPLCAFCSLKLEQCHSEANLQ
RQQCDASHKTPFISSLLTAQTMSMGTOAGTSESGRFYGLDVYGGLRWDFWCARLATKG
CEDIRVSSWLQTEFLSFHNGDFPTKVCDTDYIQYENYCSFXSQQCLMKNRNRKVSRWR
FCQNNETYNVLTPSKGEDLVLRWSQEFSTLALSRFG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product="sp32"
1682. .1880
1862. .1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50. .124
878. .1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1125.4; DB 10; Length 1880;
Pred. No. 1.2e-302;
0; Mismatches 321; Indels 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                                              379
                                                                                                         680
                                                                                                                                    676
                                                                                                                                                                  620
                                                                                                                                                                                                 619
                                                                                                                                                                                                                                                             559
                                                                                                                                                                                                                                                                                         500
                                                                                                                                                                                                                                                                                                                       499
                                                                                                                                                                                                                                                                                                                                                                                  439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79
                  790
                                                                           736
                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139
RESULT 9
BD139445
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                           S
                                                                                                                                                                                 皮
                                                                                                                                                                                                          S
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                               뭥
                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1271
                                                                                                                        1691
                                                                                                                                                                                                                                             1572
                                                                                                                                                                                                                                                                         1571
                                                                                                                                                                                                                                                                                                      1512
                                                                                                                                                                                                                                                                                                                                    1511
                                                                                                                                                                                                                                                                                                                                                                1452
                                                                                                                                                                                                                                                                                                                                                                                                1451
                                                                                                                                                                                                                                                                                                                                                                                                                              1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          741
 BD139445
Extended cD1
BD139445
BD139445.1
                                                                                                                                                   ATTCTGCCCACACCCCAGCCCAACCTGCCCACGTTCT 1727
                                                                                                                                                                                                 TTCGATGGAGCCAGGAGTTCAGCACCTTGACTCTAGGCCAGTTCGGATGAGCTGGCGTCT
                                                                                                                                                                                                                                                              GATGTCTGCAGAATGAGACTTACAGTGCGCTGAGCCCTGGCAAAAGTGAGGACGTTGTGC
                                                                                                                                                                                                                                                                                                                         GTTCCTTCAAAAGCCAGCAGTGTCTGAGAGAAACCGCAATCGGAAGGTGTCCCGCATGA
                                                                                                                                                                                                                                                                                                                                                                                   AGGATGGGGATTTCCCCTACCAAGATTTGTGACACAGAGTATATCCAGTACCCAAACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCCTTAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTACGGGTTAGATGTATACGGTGGGCTCCGCATGGATTTCTGGTGTGCCCCGGCTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGTGCCCGGCTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTTGTCAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCCAAGGCCTGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGAAACCCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCCACACAGAGGCCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATTCGATCAGCCCAGGAAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCGGATAGGCTCCGAGCCCAAGCCACAGTCCCTGTCTCTGTCTTCCGACCCTCACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGCATGCAGAATGAAACCTACAACGTGCTGACCCCTAGCAAAGGAGAGGACCTTGTGC
                                                                                                                                                                                                                                                                                                       GTTCCTTCAAAAGTCAACAGTGCCTGATGAAAAACCGGAACCGGAAGGTGTCCCCGTATGA
                                                                                                                                                                                                                                                                                                                                                                   ATAACGGGGATTTCCCCCACCAAGGTTTGTGACACGGACTACATCCAGTACCCAAACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                CAAAGGGCTGTGAAGACATCCGGGTCTCCAGCTGGCTCCAGACGGAGTTCCTCAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTTGCCTCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATTCAGTCGGCCCAGGAAATGGAGGAAATG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACTGCCCGGGTCCGAGACGTGGACTCGGCTCCTATGATGATAGAGAATATCCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCTCACAGCCCAGACCATGTCCATGGGCACCCAGGCGGGGACCTCGGAATCTGGCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACATGGCACTCTGTCCCCTCTGTGCCTTCTGCTCTCTGAAGCTGGAGCAGTGCCACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCTGGAGGAGGAGCCTTTGGTTTTGGGAAGTCGGTCTGTGACAACCTTGGACGGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGCTATTCCATTGTGATGAACAGCTGTGTCATGACCCCCTCGGCCAAGGCCTGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGAAGCCAGGAACCACGGCAGCCTCCTGCAGCTGCCTCATAAGGAGGCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCCTTCCTCTT
                               cDNA of
                              secretory protein.
                                             đđ
                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -TACGAGGAGGATGCCTACT
                                             linear
                                             PAT 18-SEP-2002
                                                                                                                                                                                                               1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1390
                                                                                                                                                                                                                                             1631
                                                                                                                                                                                                                                                                         1630
                                                                                                                                                                                                                                                                                                       1571
                                                                                                                                                                                                                                                                                                                                     1570
                                                                                                                                                                                                                                                                                                                                                                  1511
                                                                                                                                                                                                                                                                                                                                                                                                                                1451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920
                                                                                                                                                                                                                                                                                                                                                                                                  1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       970
```

밁 5

Ş

밁

음 성 음

5

음 성 음

Ś В Ş ф S 밁 5 문 8 문 Ş 밁 5

541

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 948; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OS HOMOSE (human)
OS HOMO sapiens (human)
PN JP 2002508182-A/197
PD 19-MAR-2002
PF 17-DEC-1998 JP 2000539136
PF 17-DEC-1998 US 60/069957,09-FEB-1998 US 60/074121 PR
17-DEC-1997 US 60/069957,09-FEB-1998 US 60/096116 PI LYDIE
PR 17-DEC-1997 US 60/081563,10-AUG-1998 US 60/074121 PR
BOUGUELERET, AVMERIC DUCLERT, JEAN BAPTISTE DUWAS MILWE PI EDWARDS
C12N1/21,
PC C12N15/09,C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19, PC
PC C12N5/10,C12P21/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19, PC
PC C12N5/10,C12P21/02,C12Q1/68,C12N15/00,C12N5/00,C12N15/00 CC
PC C12N5/10,C12P21/02,C12Q1/68,C12N15/00,C12N15/00,C12N15/00 CC
PC Secure 8.5
PT PC Seq LKVLLLPLAPAAA/QD
LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCARTON LGCAR
                                                                                                                                     450
                                                                                                                                                                          362
                                                                                                                                                                                                          390
                                                                                                                                                                                                                                               302
                                                                                                                                                                                                                                                                              330
                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                    270
                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                         210
                                                                                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 GGTGCTGCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30
                   CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rcrcaaggagaragaascrrcagergaagrercaeeeaeeaeaagargaeereeeeearcr
                                                                                                    cecrtarecercereariteaererrerererererescaerteaeraceaertecereceaacea
                                                                                                                                                                                                                                                 CCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTGCTGCTCCAACCT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bougueleret, L., Duclert, A. and Edwards, J.B.D.M. Extended cDNA of secretory protein Patent: JP 2002508182-A 197 19-MAR-2002; GENSET
                                                                                                                                                                                                                                                                                              ccadechdaáccaahandaáaccacacharaghdeccaahdandchdeireichaacch
                                                                                                                                                                                                                                                                                                                                                                 GAĀGGCĀGĀRĀCTĀCĊTGCCGTCTCCGTGCĀĀCCCĀCGGCTGCCGGĀĀTCCCĀCĀCTCGT
                                                                                                                                                                                                                                                                                                                                                                                        GAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACACTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                       addeaddecrererereradecaaraceaacacrerreredacacracracracacacera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGCAGCCCTCTCTCCCTACCGAATACGAACGCTTCTTCGCACTGGCTGACTCCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĠĠŦĠĊŦĠĊŦĠĊĊĠĊĠĊŦĠŦĠĠĊĸĊĊŦĠĊĊĠĊĸĠĠĊĊĊĸĠĠĸŦŦĊĠĸĊŢĆĸĠĠĊĊŦĊĊĸĊŦĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 964)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JP 2002508182-A/197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .964
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>د</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 937.6; DB 6;
Pred. No. 3.1e-250;
3; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .1e-250;
1es 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۲,
                                            568
                                                                               481
                                                                                                                  508
                                                                                                                                                    421
                                                                                                                                                                                       449
                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               149
                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                   Ś
                                                      밁
                                                                               S
                                                                                                                       Дb
                                                                                                                                                      δ
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 769
                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
CQ722423
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                     806
                                                                                                                           416
                                                                                                                                                              848
                                                                                                                                                                                               356
                                                                                                                                                                                                   769;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     602
                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 02068579-A 8357 06-SEP-2002; PE Corporation (NY) (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W. Kits, such as nucleic acid arrays, comprising a humanexons or transcripts, for detecting expres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CQ722423 2299 bp DNA
Sequence 8357 from Patent WOO2068579.
CQ722423
CQ722423.1 GI:42283280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            569 ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTTGGGAGGCGAGGAGCAAGCGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
ACTGGAGAAACCCAAAACCCTGGCAGCTTCCTGCAGCTGCCCCACACAGAGGCCTTGCTGG
                                                        cttttgctcccccccccachachachachachcctactcctatcathatcatcatcatccac
                                CTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGG
                                                                                                                                                                             AGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAA 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aagragagreraereerargaraargaagaacareeagagagerearregareeageeecag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccaagriticacicigaarciciarcirarciraacciciricciritigoriccicogggiacgan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           angaggggcagaaacagaagaagaagaagaagaagaacaggaagaggaagggaaagcaggaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCA
                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
1. .2299
                                                                                                                                                                                                                                                                          40.5%;
                                                                                                                                                                                                                                                             °,
                                                                                                                                                                                                                                                     Score 768.4; DB 6;
Pred. No. 6.5e-203;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                   DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression and c
                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
; Homo.
                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT
```

03-FEB-2004

901 928 841 868

808 781

721 748 661 889 601

밁 8 밁 S 9 Ś В Ş 밁 Ś В Ś 문 Ś 밁 S

535 967 475 907 415

大阪

```
RESULT 11
MUSSP32B
LOCUS
                                                                                                                                                                                              JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536
                                                                                                                  Direct Submission
Submitted (10-SEP-1993) Tadashi Baba, University of Tsukuba,
Institute of Applied Biochemistry; 1-1-1 Tennohdai, Tsukuba,
Ibaraki 305, Japan (Tel:81-298-53-6632, Fax:81-298-53-6632)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                    D17574
D17574.1
                                                                                                                                                                                                                                                                               Mus musculus
Eukaryota; Metazoa; Chordata;
Mammalia, Eutheria; Rodentia;
1 (bases 1 to 1253)
                                                                                                                                                                                                                                                                                                                                                                                            MUSSP32B 1253 bp mRNA line Mus musculus sp32 mRNA for proacrosin-binding cds, alternative splicing variant.
                                                                                                                                                                                                            Unpublished 2 (bases 1 to 1253)
                                                                                                                                                                                                                                      proacrosin-binding
                                                                                                                                                                                                                                                   Rodent-specific alternative
                                                                                                                                                                                                                                                                     Baba, T
                                                                                                                                                                                                                                                                                                                                        Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGAGTCTATATCCAGTACCCAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGCCCGGCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTTACGGGCTGGATTTGTACGGTGGGCTCCACATGGACTTCTGGTGTGTGCCCGGCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCACAAGACTCCCTTTGTCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTACATGGAGGAGGAGATCCTTGGTTTCGGGAAGTCGGTCTGTGACAGCCTTGGGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGGAGAAACCCAAAACCCTGGCAGCCTGCAGCTGCCCCACACAGAGGCCTTGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTGTTCCTTCAAAAGCCAGCAGTGTCTGATGAGAAACCGCAATCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGATGGGGATTTCCCTACCAAGATTTGTGACACAGACTATATCCAGTACCCAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCACGAAAGGCTGTGAAGATGTCCGAGTCTCTGGGTGGCTCCAGACTGAGTTCCTTAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCAGAATCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTGCTTGCCTCCCAGAGCCTGTCCATCGGCAACCAGGTAGGGTCCCCCAGAATCAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAGGCCAGCCTGCAGCGGCAACAATGCGACACCTCCCCACAAGACTCCCTTTGTCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACACATGTCTACCTGTGCCCTCTGTGACTTCTGCTCCTTGAAGCTGGAGCAGTGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTGTGCTATTCGATCGTGGAGAATACCTGCATCATAACCCCCACAGCCAAGGCCTGGA
           /sex="male"
/cell_type="male germ cell"
/tissue_type="testis"
                                                                   /mol_type="mRNA"
/strain="ddy"
  note="clones MN2
                                                         db_xref="taxon:10090"
                                                                                                organism="Mus
                                                                                                                                                                                                                                                                                                                                                                      GI:498163
                                                                                                                                                                                                                                      protein,
                                                                                                musculus"
 and MN4"
                                                                                                                                                                                                                                      splicing
sp32
                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; i
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                     of.
                                                                                                                                                                                                                                                     RNA
                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                     for
                                                                                                                                                                                                                                                                                                                                                                                                            near ROD 04-FEB-2003 protein, complete
                                                                                                                                                                                                                                                     mammalian
                                                                                                                                                                                                                                                                                            Euteleostomi;
; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1557
                                                                                                                                                                                                                                                                                               Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   715
                                                                Ś
                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                          밁
                                                                                             밁
                                                                                                                     á
                                                                                                                                               뮹
                                                                                                                                                                           Ş
                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sg
                989
                                            662
                                                                    626
                                                                                                602
                                                                                                                         566
                                                                                                                                                     542
                                                                                                                                                                                506
                                                                                                                                                                                                          482
                                                                                                                                                                                                                                    446
                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                            386
                                                                                                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125
                                                                                                                                                                                                                                                                                                                                                                                                            266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
AGGAAGAGGGCAGAAACAGGAAGAGC---AAGAAGAGGAACAGGAAGAGGAGGAGAAGAGC
                                                                                                                 GCAACAACGTGGAAGAGCTCCTACAATCCTTCTTGTCCCTTGGGAGGCCAAGGAGCAAGCGC
                                                                                                                                                                                                                                    TCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCGATGGTGCTGCTCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAAGTGCTGCTGCTGGAACACCTCTTTCCGCTGAGGAAT---CTCCAGCCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGTCGGAGACCAGGCCA----GGAGCAGCACAAGCAGGAGCAGATCCAAGAACATAAGC
                                                                   CAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAGC
                                                                                                                                                                           TCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCA
                                                                                                                                                                                                            ATCTCCCTTATGCTTCCTGGTTTGAGTCCTTCTGCCAGTTTGCTCAGTATCGTTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCAGGCAGCCTCTCTCGTCCACTGAGTATGAACGCTTCTTCGCCCTGCTGACCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAACAACGTGGAGGAGCTGCTGCAGTCATCCTTGTCCCTGGGAGGCAAGGACCAACAGA
                                                                                                                                                     TTGTGTCCCATGCCACAGCCACAGAACACCAGGCCTTCCAGCCTTGGCCTGAGCGGCTCA
                                                                                                                                                                                                                                                                   ACCATGTCTACTATGCCAAGAGGGTCCGGTGCTCCCAGCCCGTCTCCATCCTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                   TCGTTCAGTTGGATCAATATGAAAACCACGGATTGGTACCAGATGGTGCTGTCTGCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="sp32"
1236. .1241
/gene="sp32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="bar04499.1"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/db_xref="G1:498164"
/trainslation="MMNLAAGFILMILEVLILPGTPLSABESPASTPGSPLPYASWFESF
/COPAQYRCSNHYYYAKRVRCSQPVSILSPNTLKEVESSABEVPTSMTTP1VSHATATE
/COPAQYRCSNHYYYAKRVRCSQPVSILSPNTLKEVESSABEVFTSMTP1VEVESF
/COPAQYRCSNHYYYAKRVRCSQFTEAGLESVSRLQSDSEPKFGSQSLSSNPSFFTPRVREVES
/COPAQYRCSNHYYAKLTEAGLESVSRLQSDSEPKFGSQSLSSNPSFFTPRVREVES
/APLWMKNIQELIRSAQEMDEMNELYDDSWRSQSTGRYRKL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="sp32"
88. .1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/product="proacrosin-binding protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1039. .1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="sp32"
/note="alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="sp32"
L. .87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 612.2; DB 10,
Pred. No. 2.5e-159;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                             325
                                                                                                                                                                                                             541
                 742
                                            718
                                                                      685
                                                                                                661
                                                                                                                            625
                                                                                                                                                     601
                                                                                                                                                                                 565
                                                                                                                                                                                                                                      505
                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                     385
                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124
```

밁

밁

Ś 밁 Ś 문 Ś 문 Ś

밁 Ś

```
REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
BC011079
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                             PUBMED
                                                                                                                                                                                                                                                                                                                                                                    RS Strausberg, R.L., Feingold, B.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Scheett, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Glbbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J. W., Green, E.D.,
Bickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Schmerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
RAL Proc., Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1013
                                   Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Hump
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                        NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                  Direct Submission
Submitted (25-JUL-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                            Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC011079
BC011079.1 GI:15029725
MGC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BC011079 1524 bp mRNA linear ROD 13-FEB-2004 Mus musculus proacrosin binding protein, mRNA (cDNA clone MGC:18441 IMAGE:3984550), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCACTGGCAGGTACAGGAAATTG 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCTGGCAGCTTCCTGCAGCTG 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAGGAAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAA 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAGCCCAAGTTCAATCCCAGTCACTGTCTTCCAACCCGTCCTTCTTCACTCCCCGGG
                                                                                                                                                                                                                                                                                                                                              (bases 1 to 1524)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGGAAATGGAATGAATGAACTGTATGATGA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCGAGAGGTGGAGTCTGCTCCATTGATGATGAAGAATATCCAGGAGCTCATTCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGAAGAGGGGCAGGGACAGAGGCGGGTCTGGAGTCAGTGTCCAGGCTGCAGTCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 1524)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; виселечен
Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi;
                                                                                                                Robin Humphreys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          838
                                                                                 밁
                                                                                                                         Ś
                                                                                                                                                                        맑
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SgS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                       206
                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                         | CCTGGAAGGCAGAGACTACCTGCCGTCCCGTGCAACCCACGGCTGCCGGAATCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution through the I.M.A.G.E. Consortium/LLNL at: Series: IRAK Plate: 23 Row: 1 Column: 14.
Location/Qualifiers
                                                                                                                                                                                                                                            CTCCAGGCAGCCCTCTCTCGCCACTGAGTATGAACGCTTCTTCGCCCTGCTGACCCCAA
                                                                                                  CTCCAGGCAGCCCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAA
                                                                                                                                                                                                  TGAAGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCCA 145
                                                                                                                                                            TGGAAGTGCTGCTGCCTGGAACACCTCTTTCCGCTGAGGAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A.N., Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Center code: BCM-HGSC
                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   This family consists of several mammalian specific proacrosin binding protein sp32 sequences. sp32 is a sperm specific protein which is known to bind with with 55- and 53-kDa proacrosins and the 49-kDa acrosin intermediate. The exact function of sp32 is unclear, it is thought however that the binding of sp32 to proacrosin may be involved in packaging the acrosin zymogen into the acrosomal matrix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="MOI:1889515"
/translation="MMNLAAGFILMLLEVLLLPGTPLSAEESPASTPGSPLSSTEYER
FFALITPTWKASTTCELRATHGCRNPTLVQLLOYENHGLVPDGAVCSDLPYASWFESF
CQFAQYRCSMHYYYAGKYRCSQPVSILSPNTLEVESSAEVPPTSMTTPIVSHATATE
HQAFQPWPERLNNNVEELLQSSLSLGGKDQOSSRRPGQEQRKQEQIQEHKLEBAQEQE
EQEEEEEEBAKQEEGGTEAGLESVSRLQSDSEPKFQSQSLSSNPSFFTPRVREVES
APLMMKNIQELIRSAQEMDEWNELYDDSWRSQSTGRYRKL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="PBP sp32; Region: Proacrosin binding protein sp32. This family consists of several mammalian specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="MGC:18441 IMAGE:3984550"
/tissue_type="Mammary tumor. WAP-
old, gross tissue."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'gene="Acrbp"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /protein_id="AAH11079.1"
/db_xref="GI:15029726"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  db_xref="LocusID:54137"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="Acrbp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="synonyms: sp32, OY-TES-1"
/db_xref="LocusID:54137"
/db_xref="MGI:1859515"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'gene="Acrbp"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/strain="mix FVB/N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="Acrbp"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                 32.2%;
                                                                                                                                                                                                                                                                                                                                              <u>,,</u>
                                                                                                                                                                                                                                                                                                                                       Score 610.6; DB 10;
Pred. No. 7.3e-159;
0; Mismatches 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCMV-SPORT6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C57BL/6J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WAP-TGF alpha model.
                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            information can be for http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                  Length 1524;
                                                                                                                                                            CTCCAGCCTCCA
                                                                                                                                                                                                                                                                                                                                       15;
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                      475
                                                                                                                205
                                                                                                                                                            415
                                                                                                                                                                                                                                                                                             85
```

```
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                      RESULT 13
BC079212
LOCUS
                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                      음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                      1193
                                                                                                                                                                                                                                                                                                                                                                                                              1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   803
                                                                                                                                                                                                                                                                                                                                                                                923
                                                                                                                                                                                                                                                                                                                                                                                                                                         863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    536
                                                                                                                                                                    Rattus norvegicus cDNA clone MGC:94274 IMAGE:7131828,
BC079212
BC079212.1 GI:50925774
Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Schammen,C.M., Schuler,G.D. Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Batch,F., Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F., Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
                                                                                                                              Rattus norvegicus (Norway rat)
                                                                                                                                                              MGC
C
                                                                                       Rattus.
                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                            ACCCTGGCAGCTTCCTGCAGCTG 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCACCCCACTTCACAGTGACAGAACGCCCAGACCTTCCAGCCCTGGCCCTGAGAGAGGCTCA
                                                                                                                                                                                                                                                                                           GCACTGGCAGGTACAGGAAATTG
                                                                                                                                                                                                                                                                                                                                                                        CCCAGGAAATAGATGAAATGAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                              TCCGAGAGGTGGAGTCTGCTCCATTGATGAAGAATATCCAGGAGCTCATTCGGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                             TACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAGCCCAAGTTTCAATCCCAGTCACTGTCTTCCAACCCGTCCTTCTTCACTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAAGAGGGGCAGGGACAGAGGCGGGTCTGGAGTCAGTGTCCAGGCTGCAGTCAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGAAGAGGGGCAGAAACAGGAAGAGC---AAGAAGAGGGAACAGGAAGAGGGAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGTCGGAGACCAGGCCA----GGAGCAGCGCGCAAGCAGCAGCAGCACCAAGAACATAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAACAACGTGGAGGAGCTGCTGCAGTCATCCTTGTCCCTGGGAGGCAAGGACCAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTGGGAGGCCAGGAGCAAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAGGAAATGGATGAATGAATGAACTGTATGATGA-----CTCCTGGAGAAGCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTGTCCCATGCCACAGCCACAGAACACCAGGCCTTCCAGCCTTGGCCTGAGCGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   АСАСТСТСААС

GAGAGATAGAAGCTTCAGCTGAAGTCTCACCCACCACGATGACCTCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCATGTCTACTATGCCAAGAGGGTCCGGTGCTCCCAGCCCGTCTCCATCCTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTCCCTTATGCTTCCTGGTTTGAGTCCTTCTGCCAGTTTGCTCAGTATCGTTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCGTTCAGTTGGATCAATATGAAAACCACGGATTGGTACCAGATGGTGCTGTCTGCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGTCCAGCTGGACCAATATGAAAACCACGGCTTAGTGCCCCGATGGTGCTGCTCTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 1284)
                                                                                                                                                                                                                                                                                           1269
                                                                                                     Euteleostomi;
; Murinae;
                                                                                                                                                                                                                    ROD 03-AUG-2004
                                                                                                                                                                                                     complete
                                                                                                                                                                                                                                                                                                                                                     1246
                                                                                                                                                                                                                                                                                                                                                                                                            1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1132
                                                                                                                                                                                                                                                                                                                                                                                982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              325
                                                                                                                                                                                                                                                                                                                                                                                                                                         922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          535
                                           Ġ
```

片 S

70

ACGCGGGCGATCTTCTCCGGCCATGAGGAAGCCAGCCGCTGGCTTCCCTTCCCTCACTCC

129

Query Match Best Local S Matches 768

Local Similarity

768;

Conservative

0;

Indels Length

12;

Gaps

ω

31.9%;

Score 604.2; I Pred. No. 4.4e. 0; Mismatches

```
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REMARK
                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.B., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S. W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., J. Lu, X., Gibbs, R.A.,
Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clone distribution: MGC clone distribution information can be for through the I.M.A.G.B. Consortium/LLML at: http://image.llnl.gov Series: IRAK Plate: 184 Row: m Column: 7

This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis, Similarity but not identity to protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: Express Genomics CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Center, Stanford University School of Medicine, Stanford,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Howard Jacobs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (02-AUG-2004) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dickson, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Web site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Director MGC Project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 1284)
                                                                                                                                                                                                                    /translation="MKLAASFILMILEVILLPETPLSAEEALASTPGSPLSSTEYERF FALLFTFWKAETTCRLRATHGCRNPTLVQLDQYENHGLVPDGAVCSDLPYASWFESFC OFAQYRCSNHVYYAKRVRCSQPSLLSANTLSPNTLKEVESSAEVPLTSVTTPIVSRATAFAH QAFQFWFERLNNINVEELQSSLSLGGKEQQSSRKLGLEQOHKQEQIQEHKLEEAQEGE EQEEEEEEEAKQEEGGTEEGLDSVSRLQSDSEPKFQSKSLSSNPSFFTPRVREVES
                                                                                                                                                                                    APLMMENIQELIRSAQEMDEMNELYDDSWRSQSTGRYRKL"
                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/product="Unknown (protein
/protein_id="AAH79212.1"
/db_xref="GI:50925777"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="Testis, rat
/clone_lib="NIH_MGC_238"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:10116"
/clone="MGC:94274 IMAGE:7131828"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="Vector: pExpress1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 http://www-shgc.stanford.edu
(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .1046
e 604.2; Ub ...
1. No. 4.4e-157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Brown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for MGC:94274) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Norway) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Α.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       found
```

```
ACCESSION
VERSION
                                                                                                                     RESULT 14
AC135892/c
                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                         907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              667
AC135892
Homo sapiens 12 BAC RP11-433J6
BAC Library) complete sequence.
AC135892
AC135892.1 GI:24371346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                   GCACTGGCAGGTACAGGAAATTG 1043
                                                                                                                                                                                                                                      ACCCTGGCAGCTTCCTGCAGCTG 1005
                                                                                                                                                                                                                                                                                   CCCAAGAATGGACGAAATGAACGAACTGTACGATGA----
                                                                                                                                                                                                                                                                                                                CCCAGGAAATAGATGAAATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAA
                                                                                                                                                                                                                                                                                                                                                                                             TACGAGAAGTAGAGTCTACTCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAG
                                                                                                                                                                                                                                                                                                                                                                 rccdadaderodakerccocreccarredaredaredadadaccecadedaderecareced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAGCCCAAGTTTCACTCTGAATCTCTATCTTCTAACCCTTCTCTTTTGCTCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        cegadeceaagriteagricaagricaererererererererererererererererereses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAĀGĀGĠĠĠĊĀĠĠĠĠĀĊĀGĀĠĠĀĠĠĠŢĊŢĠĠĀŢŢĊĀĠŢĠŢĊCĀGĀĊŢĠĊĀĠŢĊĀĠĀĊŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAACAACGTGGAAGAGCTCCTACAATCCTCCTTGTCCCTTGGGAGGCCAGGAGCAAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGĀĀĠĀĀĠCĠĊĀĠĠĀĠĊĀĠĠĀĠĠĀĠĊĀĀGĀĠĀĀĠĀĀĠĀĀĠĀĀĠĠĠĀĀĠĀĠĠĊĀĀĀĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTAGTČGGĀĀĠĊTAĠGCČTGĠAGCĀĠĊĀĠĀĊĀĠĀĠĠĀĠĊĀĠĀTCĊĀĀĠĀĀĊĀĊĀĀĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGCACAAGCAGGAGCAAGGAGTGGAGCACAGGAGCAGGAGCACAAGAACACAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAACAATGTGGAGGAGCTGCTCCAGTCGTCCTTGTCCCTGGGAGGCAAGGAAGCAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCACCCCACTTCACAGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGTATCCCGTGCCACAGCCACGGAACACCAGGCCTTCCAGCCTTGGCCCGAGCGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A CA CT CTANA A GGA GGT GGA GT CCT CA GCA GA A GTT C CT CA CTT C CGT GA CCA CCC CCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACTCTCAAGGAGATAGAAGCTTCAGCTGAAGTCTCACCCACGATGACCTCCCCA 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTACCCTATGCTTCCTGGTTTTGAGTCTTTCTGCCAGTTTGCTCAGTATCGTTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regretak er elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron elektron 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGTCCAGCTGGACCAATATGAAAACCACGCTTAGTGCCCGATGGTGCTGCTGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGGAAGGCAGAGACTACCTGCCGTCTCCGTGCAACCCACGGCTGCCGGAATCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCAGGCAGCCCTCTCTCATCCACTGAATATGAACGTTTCTTCGCCCTGCTGACCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCAGGCAGCCTCTCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGĀĀĠĪĠĊĪĠĊĪĊĊĪĠĊĊĪGĀĀĀĊĀĊĊĪCTTTĊĀĠĊTGĀĠĠĀ---AGĊĪTTĀĠĊĊĪĊĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGANGGTGCTGCTCCTGCCTCTGGCACCTGCCGCAGCCCAGGATTCGACTCAGGCCCCA
                                                                    (Roswell
                                                             Park Cancer
                                                                                    linear
                                                        PRI 25-OCT-2002
Institute Human
                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                         982
                                                                                                                                                                                                                                                                                                                                                                 966
                                                                                                                                                                                                                                                                                                                                                                                                              922
                                                                                                                                                                                                                                                                                                                                                                                                                                                           906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       186
                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                STSs are identified using ePCR (Genome of a local database that includes entries local mapping efforts.
                                                                                                                                      CLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are o sequenced and submitted once, so the sequence for the remainder the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the Features listing.
                                                                                                          ANNOTATION OF FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HTG.
Homo sapiens (human)
```

```
Duble Seylers

EukaryOta; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

RS Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

RS Muzny, D.M., Adams, C., Addo-Oduola, B., Ali-osman, F.R., Allen, C., Albbrooks, S. L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Bouck, J., Bonia, S., Brieva, M., Bankenburg, K., Bonnin, D., Buhay, C., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Buhay, C., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Chowdhay, J., Charley, R., Dengard, M., Davis, C., Davis, B., David, R., Dengard, C.D., Cox, C., Coyle, M.D., Dabborne, S.R., David, R., Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H., Douthwaite, K.J., Draper, H., Dugan, Rocha, S., Dubin, K.J., Escotto, M., Falls, J., Ferraguito, D., Flagg, M., Ford, J., Foster, P., Gabisi, A., Gao, J., Garcia, A., Garza, N., Hamilton, K., Hanl, J., Harris, C., Harris, K., Hart, M., Hoylak, P., Hanlicon, K., Hanl, J., Harris, C., Harris, K., Hart, M., Hoylak, P., Hanlicon, K., Hanl, J., Harris, C., Harris, K., Hart, M., Hulyk, S., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Kelly, S., Khan, U., Leal, B., Lee, E., Lewis, L.C., Lewis, L. Li, J., Li, Z., Lichtarge, O., Lieu, J., Liu, W., Loulseged, H., Lozado, R.J., L., X., Lichtarge, O., Luciar, M., Melson, P., Mador, M., Wei, G., Merscher, S., Wetzler, M., Miler, A., Martinez, E., Massey, E., Metzler, M., Miler, Z., Mitchell, T., Wartin, R., Ma, J., Maheshvari, M., Mapua, P., Manhiney, E., McLeod, M.P., Meador, M., Wei, G., Merscher, S., Scott, G., Shen, H., Shin, C., Shocado, R.J., Li, X., Yang, P., L., Lichtarge, O., Lieu, J., Welson, D., Newtson, M., Morris, S., Moser, M., Mayuen, N., Vedado, R.P., Medor, M., Wei, G., Merscher, S., Scott, G., Shen, H., Shine, C., Shooshkari, M., Sigson, I., Statley, H., Stone, H., Statley, H., Stone, M., Tomas, S., Wertson, J., Warten, A., Mang, Q., Williams, G., Williams, G., Walle, S., Ware, Y., Ulalon, S., Ware, Y., G., Shin, M., Chand, S., 
                                                                                                                                                              Unpublished

2 (bases 1 to 56520)

Worley, K.C.

Direct Submission

Submitted (25-OCT-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

INFORMATION: http://www.hgsc.bcm.tmc.edu/ or email
only
```

Res. from 7:541-550) dbsTs, GDB,

Repeats are identified using RepeatMasker (A. Smit and p. unpublished.) for Human and Mouse sequences.

Genes and Region of sequence similarity are identified by Green

identified λq

```
FEATURES
                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                           repeat_region
                                                                            repeat_region
                                                                                                         repeat_region
                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCING READ COVERAGE: Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and measures of base quality are listed below. Description of the metrics can be found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Nuc. Acids Res. 25:3389-3402) similarity (expect < 1e-34) to (EST and cDNA sequences. Genes demonstrate at least two exons flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    at URL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               http://www.hgsc.bcm.tmc.edu:8088/quality.info/genbank.annotation.ht
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement(10256...10499)
/rpt family="AluJb"
complement(10512...10816)
                                           /rpt_family="Charliel"
19407. .19494
                                                                                                                                                                                                                   complement (17438. .17647)
/rpt_family="L2"
                                                                            19036. .1923>
/rpt_family="Charliel"
                                                                                                                                         /rpt_family="AluSx"
18967. 19000
                                                                                                                                                                                                                                                                                                                                                                                                              complement (14751. .14912)
/rpt_family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic_DN
/db_xref="taxon:9606"
/chromosome="12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rpt_family="CT-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clone="RP11-433J6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism≃"Homo sapiens"
                                                                                                                          standard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _family="(CA)n"
_family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           family="AluSp"

1. .13086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _family="(CGGGG)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _family="AluSx"
                                                                                                                                                                                                                                                                                                                                                family="AluSg"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family="AluSg"
                            family="GA-rich"
                                                                                                                                                                                      family="(CA)n"
                                                                                                                                                                                                                                                      .family="L2"
                                                                                                                                                                                                                                                                                  family="AluSq"
                                                                                                                                                                                                                                                                                                                  family="MIR"
                                                                                                                                                                                                                                                                                                                                                                               _family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                              _family="CT-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .ly="C-rich"
                                                                                                                                                                                                                                                                                                                                    6516
                                                                                                                        _name="SHGC-31323"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the
                       8
                                                        밁
                                                                                      Ś
                                                                                                                        밁
                                                                                                                                                 5
                                                                                                                                                                                    밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                  Matches 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                   44690
                                                                                                                                                                                                                                                                                  522
                                                                                                                                                        642
                             762
                                                                                                                                                                                                                                                                     AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGGCTCAGCAACAACGTGGAAGA
TAAGGAGGGACGGGAGGCTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTC
                GCTCCTACAATCCTCCTTGTCCCTTGGGAGGCCAGGAGCACAGAGCACAAGCAGGA 641
                                                                                                                                                                                                                                                   AGTGACAGAACGCCAGACCTTCCAGCCCTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA
                                                             GCAAGGAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAA
                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="AluY"
complement(28531. .28710)
                                                                                                                                                                                                                                                                                                                                                                                              complement(28094. .28403)
/rpt_family="Aluy"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_fami
22857. .2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21798. .21928
/rpt_family="AluJb"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement(26372. .26495)
/rpt_family="AluJo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_family="AluY"
complement(25873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (24689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /rpt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt_family="MIR"
24355. .24391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     complement (24424.
                                                                                                                                                                                                                                                                                                                                                                                                                             īģt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     å,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        å
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ldz,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             family="Alusx"
plement(23732...2
_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                             _family="AluSq"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family="L1MB4"
7. 25551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     family="AluSp"
ement(25002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      family="L1MB4"
Tement /24600
                                                                                                                                                                                                                                                                                                                                                                                                                                                           family="AluSg/x"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fami
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      _family="AluY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  family="(CAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fami
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _family="AluSq"
                                                                                                                                                                                                                                                                                                                               98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           _family="AluJb"
                                                                                                                                                                                                                                                                                                                                                24.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  family="Alu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _family="AluSq"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ly="AluJo"
6371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .ly="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ly="AluSg/x"
                                                                                                                                                                                                                                                                                                              Score 471.8; DB 9;
Pred. No. 7.5e-120;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .23848)
                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                              Length 56520;
                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                Gaps
44391
                                                                                                                        44511
                                                             44451
                                                                                           761
                                                                                                                                                                                      44571
                                                                                                                                                                                                                                                   44631
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; CE 1 (bases 1 to 24580)

RS Muzny,D.M., Adams,C., Bailey,M., Barbaria,J., Blankenburg,K., Bodota,B., Bouck,J., Bowie,S., Brooks,A., Buhay,C., Bunac,C., Burkett,C., Burrows,J., Caxter,M., Chacko,J., Chen,Z., Cox,C., David,R., Delgado,O., Deshazo,D., Ding,Y., Domah-Rashid,N., Porcum-Tansey,J., Frantz,P., Ganesh,R., Gorrell,J.H., Gorrell,J.H., Guevara,W., Harris,K., Hernandez,J., Hodgson,A., Hogues,M., Holloway,C., Hogak,H., Jackson,L.E., Jackson,L., Jia,Y., Jones,M., Kelly,S., Kondejewski,N., Kong,Y., Kovar,C., Leal,B., Li,Z., Lucier,R., Martin,R., Martinez,C., McLeod,M.P., Mei,G., Morgan,M., Oswal,G., Parish,B., Paxton,S., Payton,B., Perez,L., Pu,L.L., Oswal,G., Parish,B., Paxton,S., Payton,B., Perez,L., Pu,L.L., Shah,E., Shen,H., Simon,M., Sparks,A., Stemps,A., Sucgang,R., Watley,K., Weinstock,G., Weinstock,I.R., Williamson,A., Wolbe,R., Weinstock,G., Weinstock,I.R., Williamson,A., Gibbs,R., Wren,J., Wrensford,G., Yu,W., Zhou,X., Nelson,D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               44210 GTT 44208
                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (01-SEP-2000) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On or before Sep 1, 2000 this sequence version replaced gi:4589937, gi:4589938.
              Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
Contact: project Information
Center project name: 7-31
Center clone name: RP4-761J14, RP11-433J6
Center clone vector: M13; L08821
Chemistry: Dye-primer Bodipy: 92% of reads
Chemistry: Dye-terminator Big Dye: 7% of reads
Assembly program: Phrap; version 0.990329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Worley, K.C.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC079387 245880 bp DNA linear HTG 01-SEP-2000 Sapiens chromosome 12 clone RP4-761J14, RP11-433J6, *** SEQUENCING IN PROGRESS ***, 42 unordered pieces.
AC079387 AC006087 AC007438 AC006086
AC079387.1 GI:9961230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AC079387 AC00608
AC079387.1 GI:99
HTG; HTGS_PHASE1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT 44271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAATCTCTATCTAACCCTTCCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTAC
                                                                                                                                                                                                                                                                                                                                           Center: Baylor College of Medicine
Center code: BCM
Web site: http://www.hgsc.bcm.tmc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 245880)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44331
                                                                                                                                                                                                                                                                                                                                                                                                                                 27069
51198
51198
81928
89628
89628
108062
1108062
1129456
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143135
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
143136
226125
226225
227923
228023
                                                                                                                             219196
220471
220571
221823
221923
221923
223429
223529
2234827
224827
```

REFERENCE AUTHORS

KEYWORDS SOURCE

ORGANISM

VERSION ACCESSION DEFINITION

RESULT 15 AC079387/c LOCUS

S В δ 문 Ś 밁

1002

44270

942

44330

44390

882

TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL

COMMENT

```
NOTE: Estimated insert size may differ from sequence length

(see http://www.hgsc.bcm.tmc.edu/docs/cenbank draft data.html).

NOTE: This is a 'working draft' sequence. It currently

consists of 42 contigs. The true order of the pieces
is not known and their order in this sequence record is

arbitrary. Gaps between the contigs are represented as

runs of N, but the exact sizes of the gaps are unknown.

This record will be updated with the finished sequence
as soon as it is available and the accession number will

be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Consensus quality: 214565 bases at least Q40 Consensus quality: 230283 bases at least Q30 Consensus quality: 240000 bases at least Q20 Estimated insert size: 29807; agarose-fp estimation Quality coverage: 0x in Q20 bases; agarose-fp estimation
27068: contig of 27068 bp in length 27168 gap of unknown length 51197; contig of 24029 bp in length 51297; gap of unknown length 108061: contig of 18230 bp in length 108161: gap of unknown length 129455: contig of 21194 bp in length 143134; gap of unknown length 143134; gap of unknown length 160120: contig of 1259 bp in length 160220: gap of unknown length 16952: contig of 16986 bp in length 17926: contig of 16986 bp in length 17926: contig of 16982 bp in length 186168: gap of unknown length 186168: gap of unknown length 192895: contig of 8042 bp in length 192895: contig of 8042 bp in length 192895: contig of 8074 bp in length 192895: contig of 6727 bp in length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: gap of unknown length 192895: contig of 4753 bp in length 20531: gap of unknown length 20531: gap of unknown length 20531: gap of unknown length 206945: contig of 2036 bp in length 206945: contig of 1214 bp in length 206945: contig of 1215 bp in length 207968: contig of 1115 bp in length 201396: gap of unknown length 201396: gap of unknown length 201396: gap of unknown length 201396: gap of unknown length 201407: contig of 2036 bp in length 201407: contig of 1219 bp in length 201407: contig of 2036 bp in length 201407: contig of 1219 bp in length 201407: contig of 1219 bp in length 201407: contig of 1219 bp in length 201407: contig of 1219 bp in length 201407: contig of 1219 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in length 201407: contig of 1220 bp in lengt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   estimation
```

Q	Db	Ş	8	ş	B &	?	움 &	Ş	子 &	Ъ	Ş	DЪ	Ş	B	ş	Query Best L Matche	ORIGIN					PEATTIPES																	
1002	65332	942	9	882	65452		762 65512	0	702	65632	642	65692	582	65752	522	/ Match Local S les 476					source						* *		* *	• •	* *		* *		* *	*	* *	*	* *
GCT 1004	GAATGAAATATATGAT	GAATGAAATAI	TCCTATGATAATGGAGAACATCCAGGAG	TCCTATGATA	TGAATCTCTATCTTCTAACCCTTCCTCTTTTGCTC		TAAGGAGGGACGGAGGCTGTGTCTC	ACAGGAGAGAG	ACAGGAAGAGCAAGAAGAGGAACAGGAAGAGGAGGGAAAGCAGGAAGAGACACACACACACAACA	GCAAGGAGTG	CAAGG	CCTA	GCTCCTACAA	AGTGACAGAACGCCAGACCTTC	AGTGACAGAA	Similarity S;∴Conserva		/clo	) (B)	/mo/	1.	350	3	00	4 6	4	ຫິດ	1 2 1	13 5	່ເລ່	22	236069	9 4	96	25	94	200	51.5	229065 229165
	TATGATGAC	ATGATGAC	TGGAGAA	ATGGAGAA	CTTCTAA			MAGHAGA	ZAAGAAGA(	BAGCACAG	JAGCACAGO	CAATCCTCCTTGTC	CCTCCTT	GCCAGAC	CGCCAGAC	24.9%; 98.6%; ative		RP		nism=	.245880		244849:	244749:	243504:	242240:	242140:	240850:	239413:	238357:	238257:	237121:	235968:	234960:	233613:	233513:	231847:	230619:	229164:
	ATGAGAACTCCTA		CATCCAGG	CATCCAGG				JUMMUMUG	GGAACAGG	GCAGGAGC	GCAGGAGC	GICCCIGG	GTCCCTGG	CTTCCAGCC	CTTCCAGC	Score Pred. 0; Mis		="12" -761J14,	xon:96	omo sa		contig	gap of	contig	contig	gap of	gap or	contig	contig	gap of	gap of	contig	contig	gap of	gap of	contig	contig	gap of	gap of
		ACTGGAGA	AGCTCATT	AGCTCATT	CTTTTGCT		AGCTG	AAGAGGG	AAGAGGAG	CGACACAA	CGACACAA	CCTGGGAGGCCAGGAGCAAG	GAGGCCAG	CCTGGCCT	ccreecci	471.8; No. 9.4e matches		RP11-43	6=	piens"		of 1031	nkno	of 1145	of 1264	unknown	unknown	of 1337	of 1056	unknown	unknown	of 1053	of 1008	unknown	unknown	of 1566	of 1228	unknown	unknown
	AACCAAAA		CTCATTCGATCAGC		$\alpha - \alpha$		CAGACAGACTCAGAGCC	reennaec.	GGAAAGO	GAACACA	GAACACA	GAGCAAG	GAGCAAG	GAGAGGC	GAGAGGC"	DB 2; -120; 7;		376"				bp in 1	length	_	bp in 1	length	_	p in 1	bp in le	ength	ength		p in 1	ength		μ,	pin 1	֓֞֜֞֜֞֜֞֜֓֓֓֓֓֓֓֓֓֓֞֜֞֜֞֡֓֓֓֡֡	ength
	CCTGG	cccree	$\tilde{\alpha} - \tilde{\alpha}$	วั	l'ACGAGAA                 l'ACGAGAA			(GGAAGAA	AGGAAGAA	AGCAGGAA	AGCAGGAA	CGCCAGAG	CGCCAGAG	CAGCAAC	CAGCAAC	Length 2 Indels						ength.		ength	length		enort h	ength	ength	Š	enort h	ength	ength	GIGGI	e di chi	ength	ength	engen	) 1 2 1 7
	 CAGGTATAGGA	AGCTTCCTGC	CAGGAAATAGATGAAAT	TAGATGAA	CCGGGTACGAGAAGTAGAGTCTA 	5011105	CCAAGTTTCACTO	JGA CAGGG	GACAGGGGAC	IAGTGGAGCACAGGCAGGAGCCGACACAAGAACACAAGCAGGAAGAGGGGCAGAA	3AGGGGCAC	CAGAGCACAAGCAGGA	CACAAGCAG	CTGGCCTGAGAGGCTCAGCAACAACGTGGAAGA	AACGTGGA	45880; 0; Gap																							. %
	A 652	CA 1001	65 4	7 941	AC 881 	9	821	AC 65513	761	  AA 65573	AA 701	  GA 65633	GA 641	  GA 65693	GA 581	)S 0;																							

Db 65272 GTT 65270

Search completed: March 7, 2005, 17:34:35 Job time: 8243 secs

IOTAZUI MIMALIB BÜARI WESTOI

•1

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect so
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Word
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maximum
      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
      size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             number
                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of a score greater than or equal and is derived by analysis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    score:
                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued F
1: /cgr
2: /cç
3: /c
4: /
6:
     of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length: 0 length: 2000000000
                                                                                                                                                                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OLIGO_NUC Gapop 60.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-559-013E-23
1895
1 gttagaggcggcttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1202784 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gttagaggcggcttgtgtcc.....tgttgatcttcaaaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cgn2 6/ptodata/1/ina/5A_COMB.seq:*
/cgn2 6/ptodata/1/ina/5B_COMB.seq:*
/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          satisfying chosen
                                                                                                                                                                                                                                                                                                                                                   Length
     7992
17992
17992
17992
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
17175
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2005, 22:38:33 ;
                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version
(c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                    DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext
     818138359
                                                                                                                                                                                                                                                                                                                                                                                                              f results and to the sof the t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NA: *
                                                                                                                                                                                                                                                                                                                                                   ä
     US-09-621-976-3396
US-09-489-039A-6886
US-09-489-039A-7008
US-07-745-206A-14
US-08-311-363-14
US-08-311-363-12
US-08-456-200B-11
US-08-456-200B-11
              S-08-949-386-8
S-08-984-709A-8
S-08-450-272-8
S-08-450-273-8
S-08-713-118-1
S-08-713-118-1
S-09-455-543A-7
S-08-123-305C-7
S-08-223-305C-7
S-08-245-386-7
                                                                                                                                                                                    IS-08-193-078B-8
IS-08-223-305C-8
IS-08-149-097D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           parameters:
                                                                                                                                                                                                                                                                                                                                                                                                              total
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             residues
                                                                                                                                                                                                                                                                                                                                                                                                                         predicted
score of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search time 338 Seconds (without alignments) 9173.800 Million cell u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                          icted by chance to have a sof the result being printed, score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ltd.
                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
  Sequence
Sequence
Sequence
                                     Sequence
Sequence
Sequence
Sequence
                                                                                      Sequence
Sequence
                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cell updates/sec
                                                                                                                          Sequence
Sequence
                                                                                                                                                            Sequence
Sequence
                                                                                                                                                                                     Sequence
Sequence
                                                                                                             Sequence
                                                                                                                                                  Sequence
  14, Appl
12, Appl
12, Appl
12, Appl
12, Appl
13, Appl
14, Appl
15, Appl
16, Appl
16, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
17, Appl
18, Appl
17, Appl
18, Appl
18, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19, Appl
19,
                                                                                                                                                                                                                                                                                                 3396,
6886,
7008,
                                                                                                                              a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0000
     151295
399753
399753
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
818128
                                                                                                                                                                                                                                                                                                                                                                                                                                                79634
136917
151295
151295
151295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21451
36241
44676
63588
63588
77661
   18128
18128
18128
18128
18128
91
157
157
1227
227
227
227
227
227
227
227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-450-272-7
US-08-450-273-7
US-09-268-163-3
US-09-268-163-3
US-09-268-163-3
US-09-394-016-32017
US-09-394-016-38201
US-09-394-016-68405
US-09-394-016-68405
US-09-394-016-68406
US-09-394-016-68407
US-09-394-016-164746
US-09-394-016-164746
US-09-394-016-164746
US-09-394-016-16474
US-09-394-016-16458
US-09-394-016-16458
US-09-394-016-14561
US-08-394-016-14561
US-08-394-016-14561
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14564
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14563
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
US-09-394-016-14564
            Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
  1, Appli
1, Appli
1, Appli
1, Appli
164589 A
134569, A
14569, A
14569, A
14570, A
14570, A
14571, A
14571, A
14571, A
14571, A
14551, A
14552, A
14552, A
14553, A
14553, A
14556, A
14556, A
14556, A
14556, A
14556, A
14556, A
14556, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14566, A
14666, A
14666, A
14666, A
14666, A
14666, A
14666, A
14666, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16661, A
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5, Appli
30, Appli
30, Appli
30035, Appl
627, App
38201, App
38202, A
38202, A
38203, A
68405, A
68407, A
68407, A
68407, A
204230,
204231,
204231,
204231,
204231,
204231,
Appli
14, Appli
708, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Appli
Appli
Appli
Appli
Appli
```

•	
c 113 c 111 c 111 c 111 c 111 c 111 c 111 c 111 c 112 c 112 c 112 c 112 c 112 c 112 c 112 c 113 c 114 c 115 c 116 c 116 c 116 c 116 c 116 c 116 c 117	101 c 102 103 c 104 105 106 107 c 108 c 109 c 109 c 110
18 18 18 18 18 18 18 18 18 18 18 18 18 1	18 18 18 18 18 18 18 18 18
	0000
550 601 601 601 601 601 601 601 611 123 611 123 611 123 611 123 611 123 611 131 131 131 131 131 131 13	227 227 227 263 348 378 415 415 405
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
3-09-943-09-943-09-949-0	S-09-67 S-09-65 S-09-65 S-09-64 S-09-64 S-09-62 S-09-62
4 US-09-949-016-12217 4 US-09-949-016-2914 4 US-09-949-016-12826 4 US-09-949-016-16826 4 US-09-949-016-1593 4 US-09-949-016-1593 4 US-09-949-016-1593 4 US-09-949-016-1593 4 US-09-949-016-1593 4 US-09-949-016-1593 4 US-09-976-991A-419 4 US-09-978-181-2 4 US-09-978-181-2 5 US-09-978-181-2 6 US-09-978-181-2 7 US-09-978-181-2 7 US-09-978-181-3 8 US-09-285-542-1 8 US-09-285-542-1 9 US-09-978-181-3 1 US-09-181-45818-4 1 US-09-978-181-3 1 US-09-978-181-3 1 US-09-978-181-3 1 US-09-978-181-4 1 US-09-978-181-4 1 US-09-978-181-4 1 US-09-978-181-4 1 US-09-978-016-116-31 1 US-09-978-016-116-31 1 US-09-979-016-15192 1 US-09-979-016-15192 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11621 1 US-09-979-016-11743 1 US-09-979-016-1185-102 1 US-09-979-016-11861	, 6 600
Sequence Seq	Sequen Sequen Sequen Sequen Sequen Sequen Sequen Sequen Sequen Sequen
0805 080 080 080 080 080 080 080 080 080	164 164 170 170 170 174 174 174 174 174 174 174 174 174
THEOSTICE OF A DISTRICTED OF A	11, Ap 24, Ap 11, Ap 22, Ap 22, Ap 11, Ap 11, Ap 11, Ap 11, Ap 11, Ap 11, Ap 12, Ap 12, Ap 13, Ap
C 186 C 187 C 188 C 189 C 191	c 174 c 175 c 176 c 176 c 179 c 179 c 180 c 180 c 182 183
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
C 185  C 186  C 187  C 188  C 188  C 188  C 188  C 188  C 188  C 191  C 192  C 192  C 193  C 193  C 193  C 193  C 193  C 193  C 203  C	18 18 18 18 18
C 185  C 186  C 187  C 188  C 188  C 188  C 188  C 188  C 188  C 191  C 192  C 192  C 193  C 193  C 193  C 193  C 193  C 193  C 203  C	18 18 18 18 18
C 185 C 186 C 187 C 188 C 188 C 188 C 188 C 188 C 188 C 188 C 189 C 189 C 191 C 192 C 191 C 192 C 193 C 193 C 193 C 193 C 194 C 195 C 194 C 195 C 196 C 197 C 198 C 197 C 198 C 207 C 198 C 207	18 0.9 64190 18 0.9 64190 18 0.9 68580 18 0.9 72843 18 0.9 75795 18 0.9 79595 18 0.9 80706 18 0.9 81819 18 0.9 81819
C 185	18 0.9 64190 4 US-09 18 0.9 64190 4 US-09 18 0.9 68580 4 US-09 18 0.9 75793 4 US-09 18 0.9 75793 4 US-09 18 0.9 80706 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09
C 185	18 0.9 64190 4 US-09 18 0.9 64190 4 US-09 18 0.9 68580 4 US-09 18 0.9 75793 4 US-09 18 0.9 75793 4 US-09 18 0.9 80706 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09 18 0.9 81819 4 US-09
C 185	18 0.9 64190 4 US-09-949-016-1 18 0.9 64190 4 US-09-949-016-1 18 0.9 68580 4 US-09-949-016-1 18 0.9 72843 4 US-09-949-016-1 18 0.9 75799 4 US-09-949-016-1 18 0.9 79595 4 US-09-949-016-1 18 0.9 81819 4 US-09-949-016-1 18 0.9 81819 4 US-09-949-016-1 18 0.9 81819 4 US-09-949-016-1 18 0.9 81819 4 US-09-949-016-1 18 0.9 81819 4 US-09-949-016-1
C 185 18 0.9 82325 4 US-09-49-016-13518 C 186 18 0.9 86936 4 US-09-49-016-13518 C 187 18 0.9 86936 4 US-09-49-016-13518 C 188 18 0.9 87352 4 US-09-49-016-12691 C 199 18 0.9 87352 4 US-09-949-016-12692 C 193 18 0.9 87352 4 US-09-949-016-12692 C 194 18 0.9 93552 4 US-09-949-016-12581 C 195 18 0.9 93552 4 US-09-949-016-12581 C 196 18 0.9 93552 4 US-09-949-016-12581 C 197 18 0.9 93553 4 US-09-949-016-12581 C 198 18 0.9 93554 4 US-09-949-016-12581 C 199 18 0.9 93554 4 US-09-949-016-12581 C 200 18 0.9 93644 4 US-09-949-016-12667 C 201 18 0.9 9370 4 US-09-949-016-12667 C 202 18 0.9 100472 4 US-09-949-016-12667 C 203 18 0.9 100472 4 US-09-949-016-12667 C 204 18 0.9 100208 4 US-09-949-016-12667 C 205 18 0.9 100200 4 US-09-949-016-12667 C 206 18 0.9 100200 4 US-09-949-016-12667 C 207 18 0.9 100200 4 US-09-949-016-12667 C 208 18 0.9 107320 4 US-09-949-016-12667 C 208 18 0.9 107320 4 US-09-949-016-12667 C 208 18 0.9 107320 4 US-09-949-016-12667 C 209 18 0.9 107320 4 US-09-949-016-12667 C 201 18 0.9 107320 4 US-09-949-016-12667 C 202 18 0.9 107320 4 US-09-949-016-12667 C 203 18 0.9 107320 4 US-09-949-016-12667 C 204 18 0.9 107320 4 US-09-949-016-12667 C 205 18 0.9 107320 4 US-09-949-016-12667 C 206 18 0.9 107320 4 US-09-949-016-12667 C 207 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 208 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 209 18 0.9 107751 4 US-09-949-016-15408 C 200 18 0.9 107751 4 US-09-949-016-15408 C 201 18 0.9 107751 4 US-09-949-016-15408 C 202 18 0.9 107751 4 US-09-949-016-15408 C 203 18 0.9 107751 4 US-09-949-016-15408 C 204 18 0.9 107751 4 US-09-949-016-15408 C 205 18 0.9 107751 4 US-09-949-016-15408 C 206 1	18 0.9 64190 4 US-09-949-016-14712 18 0.9 64190 4 US-09-949-011-14713 18 0.9 68580 4 US-09-949-016-15844 18 0.9 72843 4 US-09-949-016-12574 18 0.9 75799 4 US-09-949-016-15318 18 0.9 79595 4 US-09-949-016-15318 18 0.9 80706 4 US-09-949-016-15347 18 0.9 81819 4 US-09-949-016-16661 18 0.9 81819 4 US-09-949-016-16662 18 0.9 81819 4 US-09-949-016-16662
C 185 18 0.9 86325 4 US-09-949-016-1331 Sequence C 186 18 0.9 86306 4 US-09-949-016-1331 Sequence C 186 18 0.9 87352 4 US-09-949-016-13631 Sequence C 190 18 0.9 87352 4 US-09-949-016-13633 Sequence C 191 18 0.9 87352 4 US-09-949-016-12831 Sequence C 191 18 0.9 87352 4 US-09-949-016-12831 Sequence C 191 18 0.9 87352 4 US-09-949-016-12831 Sequence C 191 18 0.9 87352 4 US-09-949-016-12831 Sequence C 191 18 0.9 87352 4 US-09-949-016-12831 Sequence C 191 18 0.9 94564 4 US-09-949-016-12831 Sequence C 191 18 0.9 94567 4 US-09-949-016-12841 Sequenc	18 0.9 64190 4 US-09-949-016-14712 Seque 18 0.9 64190 4 US-09-949-016-14713 Seque 18 0.9 68580 4 US-09-949-016-15844 Seque 18 0.9 72843 4 US-09-949-016-15274 Seque 18 0.9 75799 4 US-09-949-016-15318 Seque 18 0.9 79595 4 US-09-949-016-15318 Seque 18 0.9 80706 4 US-09-949-016-15347 Seque 18 0.9 81819 4 US-09-949-016-15661 Seque 18 0.9 81819 4 US-09-949-016-16661 Seque 18 0.9 81819 4 US-09-949-016-16661 Seque 28 0.9 82125 4 US-09-949-016-15662 Seque 29 0.9 82125 4 US-09-949-016-15685 Seque 20 0.9 82125 4 US-09-949-016-16685 Seque
C 185	18 0.9 64190 4 US-09-949-016-14712 Sequence 147 18 0.9 64190 4 US-09-949-011-14713 Sequence 147 18 0.9 68580 4 US-09-949-016-15943 Sequence 148 18 0.9 72843 4 US-09-949-016-12574 Sequence 125 18 0.9 75799 4 US-09-949-016-15331 Sequence 153 18 0.9 79595 4 US-09-949-016-15318 Sequence 153 18 0.9 81819 4 US-09-949-016-1547 Sequence 153 18 0.9 81819 4 US-09-949-016-15661 Sequence 153 18 0.9 81819 4 US-09-949-016-15661 Sequence 166 18 0.9 82125 4 US-09-949-016-15661 Sequence 166

	C 2447 C 2448 C 2549 251 C 252 C 253
	18 18 18 18 18
	0.000.0
$\begin{array}{c} 0.00000000000000000000000000000000000$	6950 2841 8104 8105 8174 8174 8273 8273
4 US-09-949-016-115434 4 US-09-497-855A-37 4 US-09-497-855A-37 4 US-09-949-016-14083 4 US-09-949-016-16065 4 US-09-949-016-16065 4 US-09-949-016-16065 4 US-09-949-016-161606 4 US-09-949-016-16100 4 US-09-949-016-16100 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13186 4 US-09-949-016-13187 5 US-09-949-016-13187 6	US-09-949-016-1 US-09-949-016-1 US-09-949-016-1 US-09-949-016-1 US-10-071-411A US-10-071-411A US-10-071-411A US-09-949-016-1 US-09-948-290-1
sequence 15494, A Sequence 15494, A Sequence 15496, A Sppli sequence 14083, A Sequence 14083, A Sequence 16065, A Sequence 16065, A Sequence 16065, A Sequence 16065, A Sequence 16065, A Sequence 16006, A Sequence 16101, A Sequence 16101, A Sequence 13185, A Sequence 13185, A Sequence 13185, A Sequence 13185, A Sequence 13185, A Sequence 13185, A Sequence 13186, A Sequence 13187, A Sequence 13187, A Sequence 13187, A Sequence 13187, A Sequence 13187, A Sequence 13187, A Sequence 17038, A Sequence 17037, A Sequen	equence 159/ equence 1373/ equence 155/ equence 2, 1/ equence 2, 1/ equence 130/ equence 1, 1/ equence 1, 1/
	<del></del>
0 000000 00 00 00 00 00 00 00 00 00 00	0 0 0 0 0 321 0 0 322 0 322 322 323 27
	320 321 322 323 323 324 325 326
33333333333333333333333333333333333333	320 17 0. 321 17 0. 322 17 0. 323 17 0. 324 17 0. 325 17 0. 326 17 0.
328 328 330 331 332 331 332 333 331 332 333 334 337 337 338 339 339 339 339 339 339 340 341 341 341 341 341 341 341 341	320 17 0.9 483 321 17 0.9 492 322 17 0.9 531 323 17 0.9 534 325 17 0.9 534 326 17 0.9 534 327 17 0.9 534
3328 3329 3331 3331 3331 3341 3351 3371	320 17 0.9 483 4 US-09-902-540- 321 17 0.9 492 4 US-09-621-976- 322 17 0.9 531 2 US-08-809-185- 323 17 0.9 534 3 US-09-000-6300 324 17 0.9 534 3 US-09-006-6300 325 17 0.9 534 3 US-08-862-7300 326 17 0.9 534 3 US-08-862-7300 327 17 0.9 534 3 US-08-862-7300 328 17 0.9 534 3 US-08-862-7300 329 17 0.9 534 4 US-09-016-434

	C 462 C 463	0 45 9 9 9 9		1 4 4 U 70 14 TU 7	453	C 451	C 450	C 448	C 446	C 445	C 443	C 442	C 440 441	C 439	C 438	436	C 435	C 433	C 431	C 430	C 428	427	425	423	C 422	421	c 419	C 417	C 416	C 415	C 413	C 411	C 410	۸. ۸	c 407	400		C 402		399 400	c 398		C C 3 9 4 0	
. 17	17 17 17	17	17	17	17	17	17 17	17	17 17	17	17	17	17 17	17	17	17	17	17	17 17	17	17	17	17	17	17	17 17	17	17	17	17	17	17	17	17	17	17	17	17 17	17	17 17	17	17	17	17
0.9	0.9	0000	0.00	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.5	0.0	0.5	0.0	00	00	000	>
2438	1382 1728 1739 2139 2423	9308	7890 9044	6625 6728	5824	5570	5427 5427	5427	5427	5427	5427	5427	5102	4757	4757	4486	4465	4465	4465	4465	4465	4308	4308	4076	3806	3422	3321	3321	3321	3134	2409	214:	209	195	194	193	189	183	183	171	168	150	123	,
.4.	4444	444	44	44	4.4	- 44	лuп	44	- ω	ωκ	, vo 1	_ ,2		w	u u	Д,	υW	ωι	u u	ν -	. بـ ٠	<b>4</b> L	L.	4, 4	44	4. 4	44	4, 4	44	4.	44	4.	44	4.	44	4.	ωυ	מי	, ,	4.4	υ ω 4 4	0.0		,
JS-09-949-016-14959	US-09-902-540-904 US-09-949-016-14245 US-09-949-016-14218 US-09-949-016-146218	US-09-949-016-13535 US-09-949-016-13107 US-09-949-016-15656	US-09-949-016-2425 US-09-949-016-14661	US-09-949-016-13534 US-09-949-016-13103	US-09-628-188A-1 US-09-561-818A-9	US-09-023-655-1193	PCT-US92-00730-1	US-08-464-436-3	US-08-461-917-3	US-08-460-490-1 US-08-462-728-3	US-08-460-510-1	US-09-949-016-5785	US-08-494-168-1	US-09-723-262-1	US-09-572-191-1	US-08-322-742-15	US-09-583-449A-1	US-09-583-210-1	US-08-980-400-1	US-08-477-329-1 US-08-475-458-1	US-08-180-195-1	US-09-589-619-8	US-09-949-016-748 US-08-938-291A-8	US-09-949-016-4839	US-09-949-016-880 US-09-573-080A-62	US-09-949-016-1919	US-09-866-510-21	US-09-866-510-17	US-09-866-510-15	US-09-902-540-459	US-09-614-221A-204	US-09-252-991A-869	US-09-248-796A-4572 US-09-902-540-4742	US-09-902-540-501	US-09-949-016-1526 US-09-902-540-6606	US-09-949-016-394	US-08-935-855-19	US-08-999-336-1	US-09-673-395A-4 US-08-383-744-1	US-09-248-796A-5020	US-08-812-008-31	US-09-252-991A-811	US-09-572-191-5 US-09-723-262-5	
ence	Sequence 904, App Sequence 14245, A Sequence 14218, A	ence	ence	ence	ence	lence	rence	lence	lence	ience	rence rence	uence	uence	uence	nence	nence	nence	nence	nence	nence	nence	nence	nenc	Juenc	nenc	Juenc	quenc	Juenc	nenc	ouent	quenc	duenc	quenc	quenc	quenc	dueno	quen	gueno	quen	guen	quen	quen	guen	
	C 533 17 C 534 17 C 535 17	531 532	528 529	7 01	524 525	523		0 (	000	7 6	515	513 514	0 0	511	509	508	506	505	ũã	2 5	300	8 6	97	9 5	44	92		489	488		485	483		480		477								
000	0000	000	00	00	00	0 0	00	٥.		٠.		~ ~																								_	-		~ ~	7	7 7	7	7	
98 21 4 4	86439 4 U 86440 4 U 92505 4 U	56 4 27 4	51 4	435	69	73 4	53	129 4 129 4	01 4	536 4	799 4	018 4	299 4	921 4 004 4	821 4	643 4	408	666 4	065	414 4	977	129	129	210	882	621	5254	3975	9056	3798	7628	7188	6871	6802	6738	6321	5652	5572	4364	2616	2565	2565	2565	
S-09-949-016- S-09-949-016- S-09-949-016-	US-09-949-016-11945 US-09-949-016-16990 US-09-949-016-14018	78-09-949-016- 78-09-949-016- 78-09-949-016-	IS-09-949-016- IS-09-949-016-	JS-09-949-016-	JS-09-949-016-	JS-09-949-016- JS-09-949-016-	JS-09-949-016-	US-09-949-016. US-09-949-016	US-09-949-016.	US-09-949-016	US-09-949-016 US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016 US-09-949-016	US-09-949-016	US-09-949-016	US-09-949-016 US-09-949-016	US-09-949-016	US-09-902-540	US-09-949-016	US-09-949-016	US-09-902-54	US-09-902-540	US-09-949-01	US-09-272-032-8	US-09-949-016-143	US-09-949-016-1671	US-09-902-540-1166	US-09-949-016-1271	US-09-949-016-1262	US-09-949-016	US-09-949-016-1249	US-09-422-936-60	US-09-902-540-	US-09-949-016-	US-09-949-016-1421	US-09-632-657-3	US-09-845-129	US-09-345-21	

66666666666666666666666666666666666666	539 C 540 C 542 C 544 C 544 C 544 S 547 S 548 S 550
16666666666666666666666666666666666666	17 17 17 17 17 17 17
0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	
146307 4 146307 4 146307 4 146307 4 146307 4 146307 4 1484405 1 11520409 1 1411129 1 1520606 1	7221 3712 7800 1677 66425 9032 9032 1423 1423 1433 1433 1433 1433 1433 14
US-09-9 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00 US-08-10-00	9-949-016-1275 9-949-016-1315 9-949-016-1180 9-949-016-1180 9-949-016-1216 9-949-016-1216 9-949-016-1195 9-949-016-1323 9-949-016-1333 9-949-016-13375 9-949-016-1375
Sequence 14143, A Sequence 14881, A Sequence 14883, A Sequence 14884, A Sequence 14886, A Sequence 14886, A Sequence 14888, A Sequence 14888, A Sequence 11888, A Sequence 11888, A Sequence 12835, A Sequence 12837, A Sequence 12837, A Sequence 12837, A Sequence 12837, A Sequence 12837, A Sequence 12938, A Sequence 12938, A Sequence 11947, A Sequence 11947, A Sequence 13194, A Sequence 115610, A Sequence 115611, A Sequence 15613, A Sequence 15613, A Sequence 17539, A Sequence 11760, A Sequence 13924, A Sequence 13924, A Sequence 13925, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 14701, A Sequence 17, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 15, Appli Sequence 16, Appli Sequence 17, Appli Sequence 17, Appli Sequence 18, Appli Sequence 19, Appli Sequence 19, Appli Sequence 11, Appli Sequence 11, Appli Sequence 12, Appli Sequence 13, Appli Sequence 14, Appli Sequence 15, Appli Sequence 15, Appli Sequence 16, Appli	
ი იი ი ი იიიიი იიიიიი ი ი იიიი ი იიი ი იოფოთოფოთოფოთოფოთოფოთოფოთოფოთოფოფოფოფოფო	
$\begin{array}{c} 6,66\\$	113 115 116 117 119 119 119 119 119 119 119 119 119
226 227 228 228 228 228 228 228 233 233 233 233	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	3 16 0 5 16 0 6 16 0 7 16 0 9 16 0 9 16 0
16 0.8 95 16 0.8 107 16 0.8 107 16 0.8 117 16 0.8 117 16 0.8 129 16 0.8 129 16 0.8 229 16 0.8 229 16 0.8 229 16 0.8 329 16 0.8 329 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 348 16 0.8 339 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 442 16 0.8 442 16 0.8 442 16 0.8 442 16 0.8 511 16 0.8 511 16 0.8 513	16 0.8 95 17 0.8 95 18 0.8 95
16 0.8 95 3 16 0.8 107 4 16 0.8 1176 4 16 0.8 1176 4 16 0.8 1183 4 16 0.8 1201 4 16 0.8 2201 4 16 0.8 2201 4 16 0.8 2203 4 16 0.8 329 3 16 0.8 329 4 17 14 4 18 0.8 521 4 18 0.8 521 4 18 0.8 521 4 18 0.8 521 4 18 0.8 523 4 18 0.8 523 4 18 0.8 523 4 18 0.8 523 4	16 0.8 95 1 16 0.8 95 1 16 0.8 95 1 16 0.8 95 2 16 0.8 95 3 16 0.8 95 3
16 0.8 95 16 0.8 107 16 0.8 107 16 0.8 117 16 0.8 117 16 0.8 129 16 0.8 129 16 0.8 229 16 0.8 229 16 0.8 229 16 0.8 329 16 0.8 329 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 339 16 0.8 348 16 0.8 339 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 349 16 0.8 442 16 0.8 442 16 0.8 442 16 0.8 442 16 0.8 511 16 0.8 511 16 0.8 513	2 16 0.8 95 1 US- 3 16 0.8 95 1 US- 4 16 0.8 95 1 US- 5 16 0.8 95 2 US- 6 16 0.8 95 2 US- 7 16 0.8 95 3 US- 7 16 0.8 95 3 US- 9 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 16 0.8 95 3 US- 0 17 0.8 95 3 US- 0 18 0.8 95 3 US- 0 19 0.8 95 3

•																							
00000000	00000	000	a	0 0	0 0	റററ	a		0														
750 751 752 753 754 755 756 757	745 746 747 748	740 741 742 743	736 736 737 738 739	732 733 734	729 730	726 727 728	723	720 721 721	717	713	711	708 709	706	c 703	701 c 702	0 6 6 9 8 700	0 697	0 6 9 4	693	691	689	0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0 0
16 16 16 16 16	16 16 16	16 16 16 16	16 16 16	16 16 16	1666	166	16	16 16	16 16	16 16	16	166	16 16	16	16	166	16	16	16	16	::::		
	00000	9999																					
601 601 601 601 601	601 601 601 601	601 109 109	601 601 601	601 601 601	601	601	601	601 601 601	601 601 601	601 601	601 601 601	600	000	660	200	60	60	9 60 8 60	8 B	8 60	8 6 6	8 8 8 5 5 5	
US-09-949 US-09-949 US-09-949 US-09-949 US-09-949 US-09-949 US-09-949 US-09-949	US-09 US-09 US-09 US-09 US-09	60-SD 60-SD 60-SD 60-SD 50-SD	05-05 08-05 08-05 08-05	US-09	US-0	0-Sn 0-Sn 0-Sn	0-SD 0-SD 0-SD	0-Sn 0-Sn 0-Sn	- Sn - Sn	us-co	US-1-SU	USSD	us-	-SD	-Sn	us-	us-	S C	.sn	Sn	ខ្លួ	us Su Su	
																						-09-9 9-60- 9-60-	
16- 16- 16- 16-	016-	<b>.</b>	99999	9 6 6	6616	266	161	2221		3 2 2 3	722	222	22	222	200	900	000	ەڧڧ	000		666		
5-67968 5-67978 5-67979 5-67979 67989 67989 67986 69586 69716	67945 67945 67946 67956	65501 65501 65501 65501	6278 6278 6278	6258	-6038 -6043 -6043	-5624 -5844 -5844	-5342 -5342	-525 -525 -533	484	-470	-4694	5-393 5-393	6-378	6-318 6-318	6-296	6-29	6-29	6-27	6-21	6-20	16-30 16-19 16-19	94-83 16-17	
		- 20 10 14 7	<b>ω</b> ω σ 7 μ ο	000.	υω	ai rün	6 2 8	9 8 7	761	93	844	850 80 80	793	143	119	024	022	931	54.6	999	013	687	
ស្តី ស្តី ស្តី ស្តី ស ស ស ស ស	າ ດາ ດາ ດາ ດາ ດາ	0 0 0 0 0 0	10 fo ro ro																				
Sequence 679 Sequence 679 Sequence 679 Sequence 679 Sequence 679 Sequence 679 Sequence 679 Sequence 679 Sequence 695 Sequence 697 Sequence 732	equer equer equer equer	eque eque	seque Seque Seque	seque Seque Seque	Seque	Seque Seque	Sequi Sequi	Seque Seque	Seque Seque Seque	Seque Seque	red Sed Thes	Seq.	Seq.	Seq	ည်ခန္	seq Seq	Seq	Sed Sed Sed	Seq	Seg	9 8 8 9 8 8 9 8 8 8	Sec	
110e 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		nce 6	ince (	ince	nce	ence	ence	ence ence	ence ence	ence	lence	ience	rence rence	uence	nence	nence	nence	nence	nence	nenc	nenc	quenc	
67968, A 67978, A 67979, A 67979, A 67989, A 67980, A 67986, A 69586, A 69716, A	7782 7782 7945 7946 7956	55137 55501 55502 55503	62780 62781 62787 62787	60848 62589 62590	60385	5624	5342	5255 5255 5255	4754 4808 4847	4709 4709 4754	3938 3941 4698	3931	3789	318	29026	290	290	e 265	e 215	e 203	e 190	e 839	
******	*****	****	****	D D D D	> > > >	* * * * *	, L , O , 4	, B, 7, 9 4 A A I	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	0,3,2 A A A	A 4 4 A	) (0 (0 (	793, A	12, A	19, 26,	23, 1	21, 1	32, 1	49,	99,	13,	), Ap	
													. •				11 IS	בני בנ	ID ID	PP	DD	₽₽	
												<u> </u>											
o	مممم	ممممم	0000	0000	000	000	000	0.0.0															
C 821 823 823 824 825 826 827 828 829 830	c 816 c 817 c 818 c 819 c 820	c 811 c 812 c 813 c 814 c 815	C 809 C 809 C 809	C 803	c 800 c 801 c 802	c 797 c 798 c 799	c 794 c 795 c 796	c 791 c 792 c 793	. c 788	c 785	c 782	c 779	c 77:	c 77.	c 77	77	c 76	76	76	c 76	76		
22222	16 17 18 19	112	308	2000	800 801 802	797 798 799	794 795 796	791 792 793	788 789 790	785 786 787	782 783												
22222	16 17 18 19	112	308	2000	800 801 802	797 798 799	794 795 796	791 792 793	788 789 790	785 786 787	782 783												
221 222 16 0 234 16 16 0 25 16 0 26 16 0 16 0 16 0 16 0 16 0 16 0 1	16 0 17 16 0 18 16 0 19 16 0	111 16 112 16 113 16 114 16 115 16 17 16 17 16 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	307 16 308 16 309 16	803 166 166	800 16 801 16 802 16	797 16 798 16 799 16	794 16 795 16 796 16	791 16 792 16 793 16	788 16 789 16 790 16	785 16 786 16 787 16	782 16 783 16	166	16 16	16 16	16	16	16	116	166	16	16	16	
16 0.8 22 16 0.8 23 16 0.8 24 16 0.8 25 16 0.8 26 16 0.8 27 16 0.8 28 16 0.8 20 0.8 20 0.8	16 0.8 17 16 0.8 18 16 0.8 19 16 0.8 19 16 0.8	111 16 0.8 112 16 0.8 113 16 0.8 114 16 0.8	10 16 0.8 10 16 0.8 10 16 0.8	803 16 0.8 804 16 0.8 805 16 0.8	800 16 0.8 801 16 0.8 802 16 0.8	797 16 0.8 798 16 0.8 799 16 0.8	794 16 0.8 795 16 0.8 796 16 0.8	791 16 0.8 792 16 0.8 793 16 0.8	788 16 0.8 789 16 0.8 789 16 0.8	785 16 0.8 786 16 0.8 787 16 0.8	782 16 0.8 783 16 0.8 784 16 0.8	16 0.8	16 0.8 16 0.8	16 0.8 16 0.8	16 0.8 16 0.8	16 0.8 0.8	16 0.8	16 0.8	16 0.8	16 0.8	16 0.8	16 0.8	
221 16 0.8 601 22 16 0.8 601 23 16 0.8 601 24 16 0.8 601 25 16 0.8 601 26 16 0.8 601 27 16 0.8 601 28 16 0.8 601 29 16 0.8 601 20 0.8 601	16 16 0.8 601 17 16 0.8 601 18 16 0.8 601 19 16 0.8 601 19 16 0.8 601	111 16 0.8 601 112 16 0.8 601 113 16 0.8 601 114 16 0.8 601 115 16 0.8 601	10 0.8 601 307 16 0.8 601 308 16 0.8 601 309 16 0.8 601 310 16 0.8 601	803 16 0.8 601 804 16 0.8 601 805 16 0.8 601	800 16 0.8 601 801 16 0.8 601 802 16 0.8 601	797 16 0.8 601 798 16 0.8 601 799 16 0.8 601	794 16 0.8 601 795 16 0.8 601 796 16 0.8 601	791 16 0.8 601 792 16 0.8 601 793 16 0.8 601	788 16 0.8 60 789 16 0.8 60 780 16 0.8 60	785 16 0.8 60 786 16 0.8 60 787 16 0.8 60	782 16 0.8 60 783 16 0.8 60 784 16 0.8 60	16 0.8 60 16 0.8 60	16 0.8 60	16 0.8 60	16 0.8 60	16 0.8 60 16 0.8 60	16 0.8	16 0.8 6	16 0.8	16 0.8	16 0.8 6	16 0.8 6	
221 16 0.8 601 4 UI 222 16 0.8 601 4 UI 233 16 0.8 601 4 UI 243 16 0.8 601 4 UI 25 16 0.8 601 4 UI 26 16 0.8 601 4 UI 27 16 0.8 601 4 UI 28 16 0.8 601 4 UI 29 16 0.8 601 4 UI 20 16 0.8 601 4 UI 21 10 0.8 601 4 UI 22 10 0.8 601 4 UI 23 16 0.8 601 4 UI 24 UI 25 16 0.8 601 4 UI 26 0.8 601 4 UI 27 16 0.8 601 4 UI 28 16 0.8 601 4 UI 29 16 0.8 601 4 UI 20 16 0.8 601 4 UI 20 16 0.8 601 4 UI 20 16 0.8 601 4 UI 21 16 0.8 601 4 UI 22 16 0.8 601 4 UI 23 16 0.8 601 4 UI 25 16 0.8 601 4 UI 26 16 0.8 601 4 UI 27 16 0.8 601 4 UI 28 16	16	111 16 0.8 601 4 U	16 0.8 601 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	803 16 0.8 601 4 1 804 16 0.8 601 4 1 805 16 0.8 601 4 1	800 16 0.8 601 4 1 801 16 0.8 601 4 1 802 16 0.8 601 4 1	797 16 0.8 601 4 798 16 0.8 601 4 799 16 0.8 601 4	794 16 0.8 601 4 795 16 0.8 601 4 796 16 0.8 601 4	791 16 0.8 601 4 792 16 0.8 601 4 793 16 0.8 601 4	788 16 0.8 601 4 789 16 0.8 601 4 790 16 0.8 601 4	785 16 0.8 601 4 786 16 0.8 601 4 787 16 0.8 601 4	782 16 0.8 601 4 783 16 0.8 601 4 784 16 0.8 601 4	16 0.8 601 4 16 0.8 601 4	16 0.8 601 16 0.8 601	16 0.8 601 16 0.8 601	16 0.8 601	16 0.8 601 16 0.8 601	16 0.8 601	16 0.8 601	16 0.8 601	16 0.8 601	16 0.8 601 16 0.8 601	16 0.8 601	
221 16 0.8 601 4 US-09- 22 16 0.8 601 4 US-09- 23 16 0.8 601 4 US-09- 24 16 0.8 601 4 US-09- 25 16 0.8 601 4 US-09- 26 16 0.8 601 4 US-09- 27 16 0.8 601 4 US-09- 28 16 0.8 601 4 US-09- 29 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09-	16 16 0.8 601 4 US-09- 17 16 0.8 601 4 US-09- 18 16 0.8 601 4 US-09- 19 16 0.8 601 4 US-09- 19 16 0.8 601 4 US-09- 20 16 0.8 601 4 US-09-	111 16 0.8 601 4 US-09- 112 16 0.8 601 4 US-09- 113 16 0.8 601 4 US-09- 114 16 0.8 601 4 US-09- 115 16 0.8 601 4 US-09-	10 16 0.8 601 4 US-09- 10 16 0.8 601 4 US-09- 10 16 0.8 601 4 US-09- 10 16 0.8 601 4 US-09- 10 16 0.8 601 4 US-09- 11 0 18 601 4 US-09-	903 16 0.8 601 4 US-09- 904 16 0.8 601 4 US-09- 905 16 0.8 601 4 US-09- 905 16 0.8 601 4 US-09-	800 16 0.8 601 4 US-09 801 16 0.8 601 4 US-09 802 16 0.8 601 4 US-09	797 16 0.8 601 4 US-09 798 16 0.8 601 4 US-09 799 16 0.8 601 4 US-09 799 16 0.8 601 4 US-09	794 16 0.8 601 4 US-09 795 16 0.8 601 4 US-09 796 16 0.8 601 4 US-09	791 16 0.8 601 4 US-09 792 16 0.8 601 4 US-09 793 16 0.8 601 4 US-09 793 16 0.8 601 4 US-09	788 16 0.8 601 4 US-09 789 16 0.8 601 4 US-09 780 16 0.8 601 4 US-09	785 16 0.8 601 4 US-1 786 16 0.8 601 4 US-1 787 16 0.8 601 4 US-1 787 16 0.8 601 4 US-1	782 16 0.8 601 4 US- 783 16 0.8 601 4 US- 784 16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601 4 US- 16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601 4 US-	16 0.8 601	16 0.8 601	16 0.8 601	16 0.8 601	
221 16 0.8 601 4 US-09-94 22 16 0.8 601 4 US-09-94 23 16 0.8 601 4 US-09-94 24 16 0.8 601 4 US-09-94 25 16 0.8 601 4 US-09-94 26 16 0.8 601 4 US-09-94 27 16 0.8 601 4 US-09-94 28 601 4 US-09-94 29 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94	16 16 0.8 601 4 US-09-94 17 16 0.8 601 4 US-09-94 18 16 0.8 601 4 US-09-94 19 16 0.8 601 4 US-09-94 19 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94	111 16 0.8 601 4 US-09-9-112 16 0.8 601 4 US-09-9-113 16 0.8 601 4 US-09-9-114 16 0.8 601 4 US-09-9-114 16 0.8 601 4 US-09-9-115 0.8 601 0.8 601 0.8 601 0	10 16 0.8 601 4 US-09-9 100 16 0.8 601 4 US-09-9 100 16 0.8 601 4 US-09-9 100 16 0.8 601 4 US-09-9 110 16 0.8 601 4 US-09-9 110 16 0.8 601 4 US-09-9	903 16 0.8 601 4 US-09-9 904 16 0.8 601 4 US-09-9 905 16 0.8 601 4 US-09-9 905 16 0.8 601 4 US-09-9	800 16 0.8 601 4 US-09-9 801 16 0.8 601 4 US-09-9 802 16 0.8 601 4 US-09-9	797 16 0.8 601 4 US-09-5 798 16 0.8 601 4 US-09-5 799 16 0.8 601 4 US-09-5 799 16 0.8 601 4 US-08-5	794 16 0.8 601 4 US-09-0795 16 0.8 601 4 US-09-0795 16 0.8 601 4 US-09-0796 16	791 16 0.8 601 4 US-09- 792 16 0.8 601 4 US-09- 792 16 0.8 601 4 US-09- 793 16 0.8 601 4 US-09-	788 16 0.8 601 4 US-09- 789 16 0.8 601 4 US-09- 790 16 0.8 601 4 US-09-	785 16 0.8 601 4 US-09- 785 16 0.8 601 4 US-09- 786 16 0.8 601 4 US-09-	782 16 0.8 601 4 US-09-783 16 0.8 601 4 US-09-784 16 0.8 601 4 US-09-784	16 0.8 601 4 US-09-	16 0.8 601 4 US-09- 16 0.8 601 4 US-09-	16 0.8 601 4 US-09- 16 0.8 601 4 US-09-	16 0.8 601 4 US-09-	16 0.8 601 4 US-09 16 0.8 601 4 US-09	16 0.8 601 4 US-09	16 0.8 601 4 US-09	16 0.8 601 4 US-09	16 0.8 601 4 US-09	16 0.8 601 4 US-09	16 0.8 601 4 US-09	
22 16 0.8 601 4 US-09-949-01 23 16 0.8 601 4 US-09-949-01 24 16 0.8 601 4 US-09-949-01 25 16 0.8 601 4 US-09-949-01 26 16 0.8 601 4 US-09-949-01 27 16 0.8 601 4 US-09-949-01 28 16 0.8 601 4 US-09-949-01 29 16 0.8 601 4 US-09-949-01 20 16 0.8 601 4 US-09-949-01 20 16 0.8 601 4 US-09-949-01 21 0.8 601 4 US-09-949-01	16 16 0.8 601 4 US-09-949-01 17 16 0.8 601 4 US-09-949-01 18 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 10 0.8 601 4 US-09-949-01	111 16 0.8 601 4 US-09-949-0 112 16 0.8 601 4 US-09-949-0 113 16 0.8 601 4 US-09-949-0 114 16 0.8 601 4 US-09-949-0 115 16 0.8 601 4 US-09-949-0	10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 11 0.8 601 4 US-09-949-0	803 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0	800 16 0.8 601 4 US-09-949-0 801 16 0.8 601 4 US-09-949-0 802 16 0.8 601 4 US-09-949-0	797 16 0.8 601 4 US-09-949-0 798 16 0.8 601 4 US-09-949-0 799 16 0.8 601 4 US-09-949-0	794 16 0.8 601 4 US-09-949-( 795 16 0.8 601 4 US-09-949-( 796 16 0.8 601 4 US-09-949-(	791 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 793 16 0.8 601 4 US-09-949-	788 16 0.8 601 4 US-09-949- 789 16 0.8 601 4 US-09-949- 790 16 0.8 601 4 US-09-949-	785 16 0.8 601 4 US-09-949- 786 16 0.8 601 4 US-09-949- 787 16 0.8 601 4 US-09-949-	782 16 0.8 601 4 US-09-949- 783 16 0.8 601 4 US-09-949- 784 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949. 16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949 16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	
22 16 0.8 601 4 US-09-949-01 23 16 0.8 601 4 US-09-949-01 24 16 0.8 601 4 US-09-949-01 25 16 0.8 601 4 US-09-949-01 26 16 0.8 601 4 US-09-949-01 27 16 0.8 601 4 US-09-949-01 28 16 0.8 601 4 US-09-949-01 29 16 0.8 601 4 US-09-949-01 20 16 0.8 601 4 US-09-949-01 20 16 0.8 601 4 US-09-949-01 21 0.8 601 4 US-09-949-01	16 16 0.8 601 4 US-09-949-01 17 16 0.8 601 4 US-09-949-01 18 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 10 0.8 601 4 US-09-949-01	111 16 0.8 601 4 US-09-949-0 112 16 0.8 601 4 US-09-949-0 113 16 0.8 601 4 US-09-949-0 114 16 0.8 601 4 US-09-949-0 115 16 0.8 601 4 US-09-949-0	10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 11 0.8 601 4 US-09-949-0	803 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0	800 16 0.8 601 4 US-09-949-0 801 16 0.8 601 4 US-09-949-0 802 16 0.8 601 4 US-09-949-0	797 16 0.8 601 4 US-09-949-0 798 16 0.8 601 4 US-09-949-0 799 16 0.8 601 4 US-09-949-0	794 16 0.8 601 4 US-09-949-( 795 16 0.8 601 4 US-09-949-( 796 16 0.8 601 4 US-09-949-(	791 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 793 16 0.8 601 4 US-09-949-	788 16 0.8 601 4 US-09-949- 789 16 0.8 601 4 US-09-949- 790 16 0.8 601 4 US-09-949-	785 16 0.8 601 4 US-09-949- 786 16 0.8 601 4 US-09-949- 787 16 0.8 601 4 US-09-949-	782 16 0.8 601 4 US-09-949- 783 16 0.8 601 4 US-09-949- 784 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949. 16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949 16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	
221 16 0.8 601 4 US-09-94 22 16 0.8 601 4 US-09-94 23 16 0.8 601 4 US-09-94 24 16 0.8 601 4 US-09-94 25 16 0.8 601 4 US-09-94 26 16 0.8 601 4 US-09-94 27 16 0.8 601 4 US-09-94 28 601 4 US-09-94 29 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94 20 16 0.8 601 4 US-09-94	16 16 0.8 601 4 US-09-949-01 17 16 0.8 601 4 US-09-949-01 18 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 19 16 0.8 601 4 US-09-949-01 10 0.8 601 4 US-09-949-01	111 16 0.8 601 4 US-09-949-0 112 16 0.8 601 4 US-09-949-0 113 16 0.8 601 4 US-09-949-0 114 16 0.8 601 4 US-09-949-0 115 16 0.8 601 4 US-09-949-0	10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 10 16 0.8 601 4 US-09-949-0 11 0.8 601 4 US-09-949-0	803 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0 16 0.8 601 4 US-09-949-0	800 16 0.8 601 4 US-09-949-0 801 16 0.8 601 4 US-09-949-0 802 16 0.8 601 4 US-09-949-0	797 16 0.8 601 4 US-09-949-0 798 16 0.8 601 4 US-09-949-0 799 16 0.8 601 4 US-09-949-0	794 16 0.8 601 4 US-09-949-( 795 16 0.8 601 4 US-09-949-( 796 16 0.8 601 4 US-09-949-(	791 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 792 16 0.8 601 4 US-09-949- 793 16 0.8 601 4 US-09-949-	788 16 0.8 601 4 US-09-949- 789 16 0.8 601 4 US-09-949- 780 16 0.8 601 4 US-09-949-	785 16 0.8 601 4 US-09-949- 786 16 0.8 601 4 US-09-949- 787 16 0.8 601 4 US-09-949-	782 16 0.8 601 4 US-09-949- 783 16 0.8 601 4 US-09-949- 784 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949- 16 0.8 601 4 US-09-949-	16 0.8 601 4 US-09-949. 16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949.	16 0.8 601 4 US-09-949 16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	16 0.8 601 4 US-09-949	
22 16 0.8 601 4 US-09-949-016-1109132 22 16 0.8 601 4 US-09-949-016-110471 23 16 0.8 601 4 US-09-949-016-110472 24 16 0.8 601 4 US-09-949-016-110517 25 16 0.8 601 4 US-09-949-016-110517 26 16 0.8 601 4 US-09-949-016-110561 27 16 0.8 601 4 US-09-949-016-110561 28 601 4 US-09-949-016-110662 29 16 0.8 601 4 US-09-949-016-110602 20 16 0.8 601 4 US-09-949-016-110602 21 01 01 01 01 01 01 01 01 01 01 01 01 01	16 16 0.8 601 4 US-09-949-016-109100 17 16 0.8 601 4 US-09-949-016-109110 18 16 0.8 601 4 US-09-949-016-109111 19 16 0.8 601 4 US-09-949-016-109121 19 16 0.8 601 4 US-09-949-016-109122 20 16 0.8 601 4 US-09-949-016-109122	111 16 0.8 601 4 US-09-949-016-109077 112 16 0.8 601 4 US-09-949-016-109088 113 16 0.8 601 4 US-09-949-016-109089 114 16 0.8 601 4 US-09-949-016-109099 15 16 0.8 601 4 US-09-949-016-109099	10 16 0.8 601 4 US-09-949-016-109055 1008 16 0.8 601 4 US-09-949-016-109056 1009 16 0.8 601 4 US-09-949-016-109066 100 16 0.8 601 4 US-09-949-016-109067 110 16 0.8 601 4 US-09-949-016-109067	803 16 0.8 601 4 US-09-949-016-109033 804 16 0.8 601 4 US-09-949-016-109034 805 16 0.8 601 4 US-09-949-016-109045 806 17 0S-09-949-016-109045	800 16 0.8 601 4 US-09-949-016-109012 801 16 0.8 601 4 US-09-949-016-109023 802 16 0.8 601 4 US-09-949-016-109023	797 16 0.8 601 4 US-09-949-016-109000 798 16 0.8 601 4 US-09-949-016-109001 799 16 0.8 601 4 US-09-949-016-109011	794 16 0.8 601 4 US-09-949-016-108979 795 16 0.8 601 4 US-09-949-016-108989 796 16 0.8 601 4 US-09-949-016-108990	791 16 0.8 601 4 US-09-949-016-108967 792 16 0.8 601 4 US-09-949-016-108968 792 16 0.8 601 4 US-09-949-016-108978 793 16 0.8 601 4 US-09-949-016-108978	788 16 0.8 601 4 US-09-949-016-108946 789 16 0.8 601 4 US-09-949-016-108956 789 16 0.8 601 4 US-09-949-016-108957	785 16 0.8 601 4 US-09-949-016-108934 786 16 0.8 601 4 US-09-949-016-108934 786 16 0.8 601 4 US-09-949-016-108945 787 16 0.8 601 4 US-09-949-016-108945	782 16 0.8 601 4 US-09-949-016-108923 783 16 0.8 601 4 US-09-949-016-108923 784 16 0.8 601 4 US-09-949-016-108924	16 0.8 601 4 US-09-949-016-92222 16 0.8 601 4 US-09-949-016-94075	16 0.8 601 4 US-09-949-016-88347 16 0.8 601 4 US-09-949-016-893156 16 0.8 601 4 US-09-949-016-88816	16 0.8 601 4 US-09-949-016-83006 16 0.8 601 4 US-09-949-016-85508	16 0.8 601 4 US-09-949-016-83004 16 0.8 601 4 US-09-949-016-83004 16 0.8 601 4 US-09-949-016-83005	16 0.8 601 4 US-09-949-016-81580 16 0.8 601 4 US-09-949-016-82220	16 0.8 601 4 US-09-949-016-79805	16 0.8 601 4 US-09-949-016-79803	16 0.8 601 4 US-09-949-016-79457	16 0.8 601 4 US-09-949-016-77842	16 0.8 601 4 US-09-949-016-76314 16 0.8 601 4 US-09-949-016-77841	16 0.8 601 4 US-09-949-016-76120	
22 16 0.8 601 4 US-09-949-016-1109132 22 16 0.8 601 4 US-09-949-016-110471 23 16 0.8 601 4 US-09-949-016-110472 24 16 0.8 601 4 US-09-949-016-110517 25 16 0.8 601 4 US-09-949-016-110517 26 16 0.8 601 4 US-09-949-016-110561 27 16 0.8 601 4 US-09-949-016-110561 28 601 4 US-09-949-016-110662 29 16 0.8 601 4 US-09-949-016-110602 20 16 0.8 601 4 US-09-949-016-110602 21 01 01 01 01 01 01 01 01 01 01 01 01 01	16 16 0.8 601 4 US-09-949-016-109100 17 16 0.8 601 4 US-09-949-016-109110 18 16 0.8 601 4 US-09-949-016-109111 19 16 0.8 601 4 US-09-949-016-109121 19 16 0.8 601 4 US-09-949-016-109122 20 16 0.8 601 4 US-09-949-016-109122	111 16 0.8 601 4 US-09-949-016-109077 112 16 0.8 601 4 US-09-949-016-109088 113 16 0.8 601 4 US-09-949-016-109089 114 16 0.8 601 4 US-09-949-016-109099 15 16 0.8 601 4 US-09-949-016-109099	10 16 0.8 601 4 US-09-949-016-109055 1008 16 0.8 601 4 US-09-949-016-109056 1009 16 0.8 601 4 US-09-949-016-109066 100 16 0.8 601 4 US-09-949-016-109067 110 16 0.8 601 4 US-09-949-016-109067	803 16 0.8 601 4 US-09-949-016-109033 804 16 0.8 601 4 US-09-949-016-109034 805 16 0.8 601 4 US-09-949-016-109045 806 17 0S-09-949-016-109045	800 16 0.8 601 4 US-09-949-016-109012 801 16 0.8 601 4 US-09-949-016-109023 802 16 0.8 601 4 US-09-949-016-109023	797 16 0.8 601 4 US-09-949-016-109000 798 16 0.8 601 4 US-09-949-016-109011 799 16 0.8 601 4 US-09-949-016-109011	794 16 0.8 601 4 US-09-949-016-108979 795 16 0.8 601 4 US-09-949-016-108989 796 16 0.8 601 4 US-09-949-016-108990	791 16 0.8 601 4 US-09-949-016-108967 792 16 0.8 601 4 US-09-949-016-108968 792 16 0.8 601 4 US-09-949-016-108978 793 16 0.8 601 4 US-09-949-016-108978	788 16 0.8 601 4 US-09-949-016-108946 789 16 0.8 601 4 US-09-949-016-108956 789 16 0.8 601 4 US-09-949-016-108957	785 16 0.8 601 4 US-09-949-016-108934 786 16 0.8 601 4 US-09-949-016-108934 786 16 0.8 601 4 US-09-949-016-108945 787 16 0.8 601 4 US-09-949-016-108945	782 16 0.8 601 4 US-09-949-016-108923 783 16 0.8 601 4 US-09-949-016-108923 784 16 0.8 601 4 US-09-949-016-108924	16 0.8 601 4 US-09-949-016-92222 16 0.8 601 4 US-09-949-016-94075	16 0.8 601 4 US-09-949-016-88347 16 0.8 601 4 US-09-949-016-893156 16 0.8 601 4 US-09-949-016-88816	16 0.8 601 4 US-09-949-016-83006 16 0.8 601 4 US-09-949-016-85508	16 0.8 601 4 US-09-949-016-83004 16 0.8 601 4 US-09-949-016-83004 16 0.8 601 4 US-09-949-016-83005	16 0.8 601 4 US-09-949-016-81580 16 0.8 601 4 US-09-949-016-82220	16 0.8 601 4 US-09-949-016-79805	16 0.8 601 4 US-09-949-016-79803	16 0.8 601 4 US-09-949-016-79457	16 0.8 601 4 US-09-949-016-77842	16 0.8 601 4 US-09-949-016-76314 16 0.8 601 4 US-09-949-016-77841	16 0.8 601 4 US-09-949-016-76120	
22 16 0.8 601 4 US-09-949-016-10913 Sequence 23 16 0.8 601 4 US-09-949-016-110471 Sequence 24 16 0.8 601 4 US-09-949-016-110472 Sequence 25 16 0.8 601 4 US-09-949-016-110516 Sequence 26 16 0.8 601 4 US-09-949-016-110516 Sequence 27 16 0.8 601 4 US-09-949-016-110561 Sequence 28 16 0.8 601 4 US-09-949-016-110561 Sequence 29 16 0.8 601 4 US-09-949-016-110560 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence	16 16 0.8 601 4 US-09-949-016-109100 Sequence 17 16 0.8 601 4 US-09-949-016-109110 Sequence 18 16 0.8 601 4 US-09-949-016-109111 Sequence 19 16 0.8 601 4 US-09-949-016-109121 Sequence 10 0.8 601 4 US-09-949-016-109122 Sequence 20 16 0.8 601 4 US-09-949-016-109122 Sequence	111 16 0.8 601 4 US-09-949-016-109077 Sequence 112 16 0.8 601 4 US-09-949-016-109088 Sequence 113 16 0.8 601 4 US-09-949-016-109089 Sequence 114 16 0.8 601 4 US-09-949-016-109099 Sequence 115 0.8 601 4 US-09-949-016-109099 Sequence	307 16 0.8 601 4 US-09-949-016-109055 Sequence 308 16 0.8 601 4 US-09-949-016-109056 Sequence 309 16 0.8 601 4 US-09-949-016-109066 Sequence 309 16 0.8 601 4 US-09-949-016-109067 Sequence	B03 16 0.8 601 4 US-09-949-016-109033 Sequence 305 16 0.8 601 4 US-09-949-016-109034 Sequence 305 16 0.8 601 4 US-09-949-016-109044 Sequence 306 16 0.8 601 4 US-09-949-016-109045 Sequence	800 16 0.8 601 4 US-09-949-016-109022 Sequence 801 16 0.8 601 4 US-09-949-016-109022 Sequence 802 16 0.8 601 4 US-09-949-016-109023 Sequence	797 16 0.8 601 4 US-09-349-016-109001 Sequence 798 16 0.8 601 4 US-09-949-016-109001 Sequence 799 16 0.8 601 4 US-09-949-016-109011 Sequence	794 16 0.8 601 4 US-09-949-016-108979 Sequence 795 16 0.8 601 4 US-09-949-016-108989 Sequence 796 16 0.8 601 4 US-09-949-016-108990 Sequence	791 16 0.8 601 4 US-09-949-016-108967 Sequence 792 16 0.8 601 4 US-09-949-016-108968 Sequence 792 16 0.8 601 4 US-09-949-016-108978 Sequence 793 16 0.8 601 4 US-09-949-016-108978 Sequence	788 16 0.8 601 4 US-09-949-016-108946 Sequence 780 16 0.8 601 4 US-09-949-016-108956 Sequence 780 16 0.8 601 4 US-09-949-016-108957 Sequence	785 16 0.8 601 4 US-09-949-016-108934 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequence	782 16 0.8 601 4 US-09-949-016-108924 Sequence 783 16 0.8 601 4 US-09-949-016-108924 Sequence 784 16 0.8 601 4 US-09-949-016-108924 Sequence	16 0.8 601 4 US-09-949-016-94075 Sequence 16 0.8 601 4 US-09-949-016-94075 Sequence	16 0.8 601 4 US-09-949-016-88347 Sequence 16 0.8 601 4 US-09-949-016-89156 Sequence 16 0.8 601 4 US-09-949-016-8916	16 0.8 601 4 US-09-949-016-83006 Sequence 16 0.8 601 4 US-09-949-016-8508 Sequence 16 0.8 601 4 US-09-949-016-8550	16 0.8 601 4 US-09-949-016-82221 Sequence 16 0.8 601 4 US-09-949-016-87006 Sequence 16 0.8 601 4 US-09-940-940 Sequence 16 0.8 601 4 US-09-940-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4	16 0.8 601 4 US-09-949-016-81580 Sequent 16 0.8 601 4 US-09-949-016-82220 Sequent	16 0.8 601 4 US-09-949-016-79805 Sequent	16 0.8 601 4 US-09-949-016-79803 Sequen	16 0.8 601 4 US-09-949-016-79457 Sequen	16 0.8 601 4 US-09-949-016-77842 Sequen	16 0.8 601 4 US-09-949-016-76314 Sequen	16 0.8 601 4 US-09-949-016-76120 Semien	
22 16 0.8 601 4 US-09-949-016-10913 Sequence 23 16 0.8 601 4 US-09-949-016-110471 Sequence 24 16 0.8 601 4 US-09-949-016-110472 Sequence 25 16 0.8 601 4 US-09-949-016-110516 Sequence 26 16 0.8 601 4 US-09-949-016-110516 Sequence 27 16 0.8 601 4 US-09-949-016-110561 Sequence 28 16 0.8 601 4 US-09-949-016-110561 Sequence 29 16 0.8 601 4 US-09-949-016-110560 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110606 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence 29 16 0.8 601 4 US-09-949-016-110607 Sequence	16 16 0.8 601 4 US-09-949-016-109100 Sequence 17 16 0.8 601 4 US-09-949-016-109110 Sequence 18 16 0.8 601 4 US-09-949-016-109111 Sequence 19 16 0.8 601 4 US-09-949-016-109121 Sequence 10 0.8 601 4 US-09-949-016-109122 Sequence 20 16 0.8 601 4 US-09-949-016-109122 Sequence	111 16 0.8 601 4 US-09-949-016-109077 Sequence 112 16 0.8 601 4 US-09-949-016-109088 Sequence 113 16 0.8 601 4 US-09-949-016-109089 Sequence 114 16 0.8 601 4 US-09-949-016-109099 Sequence 115 0.8 601 4 US-09-949-016-109099 Sequence	307 16 0.8 601 4 US-09-949-016-109055 Sequence 308 16 0.8 601 4 US-09-949-016-109056 Sequence 309 16 0.8 601 4 US-09-949-016-109066 Sequence 309 16 0.8 601 4 US-09-949-016-109067 Sequence	B03 16 0.8 601 4 US-09-949-016-109033 Sequence 305 16 0.8 601 4 US-09-949-016-109034 Sequence 305 16 0.8 601 4 US-09-949-016-109044 Sequence 306 16 0.8 601 4 US-09-949-016-109045 Sequence	800 16 0.8 601 4 US-09-949-016-109022 Sequence 801 16 0.8 601 4 US-09-949-016-109022 Sequence 802 16 0.8 601 4 US-09-949-016-109023 Sequence	797 16 0.8 601 4 US-09-349-016-109001 Sequence 798 16 0.8 601 4 US-09-949-016-109001 Sequence 799 16 0.8 601 4 US-09-949-016-109011 Sequence	794 16 0.8 601 4 US-09-949-016-108979 Sequence 795 16 0.8 601 4 US-09-949-016-108989 Sequence 796 16 0.8 601 4 US-09-949-016-108990 Sequence	791 16 0.8 601 4 US-09-949-016-108967 Sequence 792 16 0.8 601 4 US-09-949-016-108968 Sequence 792 16 0.8 601 4 US-09-949-016-108978 Sequence 793 16 0.8 601 4 US-09-949-016-108978 Sequence	788 16 0.8 601 4 US-09-949-016-108946 Sequence 780 16 0.8 601 4 US-09-949-016-108956 Sequence 780 16 0.8 601 4 US-09-949-016-108957 Sequence	785 16 0.8 601 4 US-09-949-016-108934 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequence	782 16 0.8 601 4 US-09-949-016-108924 Sequence 783 16 0.8 601 4 US-09-949-016-108924 Sequence 784 16 0.8 601 4 US-09-949-016-108924 Sequence	16 0.8 601 4 US-09-949-016-94075 Sequence 16 0.8 601 4 US-09-949-016-94075 Sequence	16 0.8 601 4 US-09-949-016-88347 Sequence 16 0.8 601 4 US-09-949-016-89156 Sequence 16 0.8 601 4 US-09-949-016-8916	16 0.8 601 4 US-09-949-016-83006 Sequence 16 0.8 601 4 US-09-949-016-8508 Sequence 16 0.8 601 4 US-09-949-016-8550	16 0.8 601 4 US-09-949-016-82221 Sequence 16 0.8 601 4 US-09-949-016-87006 Sequence 16 0.8 601 4 US-09-940-940 Sequence 16 0.8 601 4 US-09-940-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4 US-09-940 Sequence 16 0.8 601 4	16 0.8 601 4 US-09-949-016-81580 Sequent 16 0.8 601 4 US-09-949-016-82220 Sequent	16 0.8 601 4 US-09-949-016-79805 Sequent	16 0.8 601 4 US-09-949-016-79803 Sequen	16 0.8 601 4 US-09-949-016-79457 Sequen	16 0.8 601 4 US-09-949-016-77842 Sequen	16 0.8 601 4 US-09-949-016-76314 Sequen	16 0.8 601 4 US-09-949-016-76120 Semien	
22 16 0.8 601 4 US-09-949-016-1109132 22 16 0.8 601 4 US-09-949-016-110471 23 16 0.8 601 4 US-09-949-016-110472 24 16 0.8 601 4 US-09-949-016-110517 25 16 0.8 601 4 US-09-949-016-110517 26 16 0.8 601 4 US-09-949-016-110561 27 16 0.8 601 4 US-09-949-016-110561 28 601 4 US-09-949-016-110662 29 16 0.8 601 4 US-09-949-016-110602 20 16 0.8 601 4 US-09-949-016-110602 21 01 01 01 01 01 01 01 01 01 01 01 01 01	16 16 0.8 601 4 US-09-949-016-109100 Sequence 17 16 0.8 601 4 US-09-949-016-109110 Sequence 18 16 0.8 601 4 US-09-949-016-109111 Sequence 19 16 0.8 601 4 US-09-949-016-109121 Sequence 10 0.8 601 4 US-09-949-016-109122 Sequence 20 16 0.8 601 4 US-09-949-016-109122 Sequence	111 16 0.8 601 4 US-09-949-016-109077 Sequence 112 16 0.8 601 4 US-09-949-016-109088 Sequence 113 16 0.8 601 4 US-09-949-016-109089 Sequence 114 16 0.8 601 4 US-09-949-016-109099 Sequence 115 0.8 601 4 US-09-949-016-109099 Sequence	307 16 0.8 601 4 US-09-949-016-109055 Sequence 308 16 0.8 601 4 US-09-949-016-109056 Sequence 309 16 0.8 601 4 US-09-949-016-109066 Sequence 309 16 0.8 601 4 US-09-949-016-109067 Sequence	B03 16 0.8 601 4 US-09-949-016-109033 Sequence 305 16 0.8 601 4 US-09-949-016-109034 Sequence 305 16 0.8 601 4 US-09-949-016-109044 Sequence 306 16 0.8 601 4 US-09-949-016-109045 Sequence	800 16 0.8 601 4 US-09-949-016-109022 Sequence 801 16 0.8 601 4 US-09-949-016-109022 Sequence 802 16 0.8 601 4 US-09-949-016-109023 Sequence	797 16 0.8 601 4 US-09-349-016-109001 Sequence 798 16 0.8 601 4 US-09-949-016-109001 Sequence 799 16 0.8 601 4 US-09-949-016-109011 Sequence	794 16 0.8 601 4 US-09-949-016-108979 Sequence 795 16 0.8 601 4 US-09-949-016-108989 Sequence 796 16 0.8 601 4 US-09-949-016-108990 Sequence	791 16 0.8 601 4 US-09-949-016-108967 Sequence 792 16 0.8 601 4 US-09-949-016-108968 Sequence 792 16 0.8 601 4 US-09-949-016-108978 Sequence 793 16 0.8 601 4 US-09-949-016-108978 Sequence	788 16 0.8 601 4 US-09-949-016-108946 Sequence 780 16 0.8 601 4 US-09-949-016-108956 Sequence 780 16 0.8 601 4 US-09-949-016-108957 Sequence	785 16 0.8 601 4 US-09-949-016-108934 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequenc 787 16 0.8 601 4 US-09-949-016-108935 Sequence	782 16 0.8 601 4 US-09-949-016-96268 Sequence 96268, 783 16 0.8 601 4 US-09-949-016-108923 Sequence 108923, 784 16 0.8 601 4 US-09-949-016-108924 Sequence 108923, 784 16 0.8 601 4 US-09-949-016-108924	16 0.8 601 4 US-09-949-016-94075 Sequence 16 0.8 601 4 US-09-949-016-94075 Sequence	16 0.8 601 4 US-09-949-016-88347 Sequence 88347, 16 0.8 601 4 US-09-949-016-89156, Sequence 89156, 16 0.8 601 4 US-09-949-016-8036	16 0.8 601 4 US-09-949-016-83006 Sequence 83006, 16 0.8 601 4 US-09-949-016-85508 Sequence 85006, 16 0.8 601 4 US-09-949-016-85508 Sequence 85008	16 0.8 601 4 US-09-949-016-82221 Sequence 82221, 16 0.8 601 4 US-09-949-016-83004 Sequence 83004, 16 0.8 601 4 US-09-949-016-83006	16 0.8 601 4 US-09-949-016-81580 Sequence 81580 16 0.8 601 4 US-09-949-016-82220 Sequence 8220,	16 0.8 601 4 US-09-949-016-79805 Sequence 79805,	16 0.8 601 4 US-09-949-016-79803 Sequence 79803	16 0.8 601 4 US-09-949-016-79457 Sequence 79457, 16 0.8 601 4 US-09-949-016-79802 Sequence 79802	16 0.8 601 4 US-09-949-016-77842 Sequence 77842.	16 0.8 601 4 US-09-949-016-76314 Sequence 76314, 16 0.6 601 4 US-09-949-016-77841 Sequence 77841	16 0.8 601 4 US-09-949-016-76120 Semience 76120	

CC CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	C 831 832 833 834 835 836 837 838 841 841
	166 166 166 166 166
	US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0 4 US-0
,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	016-1 016-1 016-1 016-1 016-1 016-1 016-1 016-1 016-1
200803 20	0652 0696 0696 0697 94047 42047 4204 4204 4204 4204 4204 4204
a a a a a a a a a a a a a a a a a a a	seques s seques seques seques seques seques seques seques seques seques seques seques seques seques seques seques seques s seques s seques s s seques s seques s s s s s s s s s s s s s s s s s s
117841, 120931, 120931, 120931, 120931, 120931, 123941, 12341, 123427, 123437, 123437, 123437, 123633, 123633, 123633, 123633, 123633, 123633, 123633, 123633, 1236	110652, 110696, 1110697, 1113879, 1114047, 1114215, 1114383, 1114383, 1114551, 1114719, 111480857, 1117077,
0 000000 000 0 0 000000 000 0000	ი ი ი
	904 905 906 907 908 911 911 911 911 911 911 911
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	904 16 0. 905 16 0. 906 16 0. 907 16 0. 908 16 0. 909 16 0. 911 16 0. 911 16 0. 912 16 0. 913 16 0. 914 16 0.
0 0 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	904 16 0.8 6 905 16 0.8 6 906 16 0.8 6 907 16 0.8 6 909 16 0.8 6 910 16 0.8 6 911 16 0.8 6 911 16 0.8 6 911 16 0.8 6 911 16 0.8 6 911 16 0.8 6
917 16 0.8 601 4 US C 923 16 0.8 601 4 US C	904 16 0.8 601 4 UI 905 16 0.8 601 4 UI 906 16 0.8 601 4 UI 907 16 0.8 601 4 UI 908 16 0.8 601 4 UI 909 16 0.8 601 4 UI 910 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI 911 16 0.8 601 4 UI
918 16 0.8 601 4 US-09-09-09-09-09-09-09-09-09-09-09-09-09-	904 16 0.8 601 4 US-09- 905 16 0.8 601 4 US-09- 907 16 0.8 601 4 US-09- 908 16 0.8 601 4 US-09- 908 16 0.8 601 4 US-09- 910 16 0.8 601 4 US-09- 911 16 0.8 601 4 US-09- 911 16 0.8 601 4 US-09- 911 16 0.8 601 4 US-09- 913 16 0.8 601 4 US-09- 914 16 0.8 601 4 US-09- 915 16 0.8 601 4 US-09- 916 0.8 601 4 US-09- 917 16 0.8 601 4 US-09- 918 16 0.8 601 4 US-09- 919 10 0.8 601 4 US-09- 919 11 0 0.8 601 4 US-09- 919 11 0 0.8 601 4 US-09- 919 11 0 0.8 601 4 US-09-
918 16 0.8 601 4 US-09-949-0 0 923 16 0.8 601 4 US-09-949-0 0 923 16 0.8 601 4 US-09-949-0 0 925 16 0.8 601 4 US-09-949-0 0 926 16 0.8 601 4 US-09-949-0 0 927 16 0.8 601 4 US-09-949-0 0 928 16 0.8 601 4 US-09-949-0 0 929 16 0.8 601 4 US-09-949-0 0 930 16 0.8 601 4 US-09-949-0 0 931 16 0.8 601 4 US-09-949-0 0 932 16 0.8 601 4 US-09-949-0 0 933 16 0.8 601 4 US-09-949-0 0 934 16 0.8 601 4 US-09-949-0 0 935 16 0.8 601 4 US-09-949-0 0 936 16 0.8 601 4 US-09-949-0 0 937 16 0.8 601 4 US-09-949-0 0 938 16 0.8 601 4 US-09-949-0 0 938 16 0.8 601 4 US-09-949-0 0 948 16 0.8 601 4 US-09-949-0 0 948 16 0.8 601 4 US-09-949-0 0 955 16 0.8 601 4 US-09-949-0 0 956 16 0.8 601 4 US-09-949-0 0 957 16 0.8 601 4 US-09-949-0 0 958 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 959 16 0.8 601 4 US-09-949-0 0 960 16 0.8 601 4 US-09-949-0 0	904 16 0.8 601 4 US-09-949-0 905 16 0.8 601 4 US-09-949-0 906 16 0.8 601 4 US-09-949-0 907 16 0.8 601 4 US-09-949-0 908 16 0.8 601 4 US-09-949-0 910 16 0.8 601 4 US-09-949-0 911 16 0.8 601 4 US-09-949-0 912 16 0.8 601 4 US-09-949-0 913 16 0.8 601 4 US-09-949-0 914 16 0.8 601 4 US-09-949-0 915 16 0.8 601 4 US-09-949-0 916 0.8 601 4 US-09-949-0 917 16 0.8 601 4 US-09-949-0 918 601 4 US-09-949-0 919 16 0.8 601 4 US-09-949-0 919 17 18 0.8 601 4 US-09-949-0 919 18 0.8 601 4 US-09-949-0
917 16 0.8 601 4 US-09-949-01 16 0.8 601 4 U	904 16 0.8 601 4 US-09-949-016-1649: 905 16 0.8 601 4 US-09-949-016-16737 906 16 0.8 601 4 US-09-949-016-16737 907 16 0.8 601 4 US-09-949-016-17011 908 16 0.8 601 4 US-09-949-016-17011 908 16 0.8 601 4 US-09-949-016-17267 910 16 0.8 601 4 US-09-949-016-17267 911 16 0.8 601 4 US-09-949-016-17388 912 16 0.8 601 4 US-09-949-016-17557 913 16 0.8 601 4 US-09-949-016-17627 914 16 0.8 601 4 US-09-949-016-17627 915 16 0.8 601 4 US-09-949-016-17627 916 16 0.8 601 4 US-09-949-016-17627
917 918 919 919 910 911 911 911 911 911 911 911	904 16 0.8 601 4 US-09-949-016-164937 905 16 0.8 601 4 US-09-949-016-167373 906 16 0.8 601 4 US-09-949-016-177313 907 16 0.8 601 4 US-09-949-016-170138 908 16 0.8 601 4 US-09-949-016-170168 909 16 0.8 601 4 US-09-949-016-1720168 910 16 0.8 601 4 US-09-949-016-172823 911 16 0.8 601 4 US-09-949-016-172826 912 16 0.8 601 4 US-09-949-016-175651 913 16 0.8 601 4 US-09-949-016-175651 914 16 0.8 601 4 US-09-949-016-175621 915 16 0.8 601 4 US-09-949-016-175621 916 16 0.8 601 4 US-09-949-016-175631 917 16 0.8 601 4 US-09-949-016-175631 918 178 188 601 4 US-09-949-016-175631 919 19 19 19 19 19 19 19 19 19 19 19 19
917 16 0.8 601 4 US-09-949-016-177423 Sequence 2920 16 0.8 601 4 US-09-949-016-177423 Sequence 2921 16 0.8 601 4 US-09-949-016-177823 Sequence 2922 16 0.8 601 4 US-09-949-016-177823 Sequence 2923 16 0.8 601 4 US-09-949-016-178846 Sequence 2924 16 0.8 601 4 US-09-949-016-178846 Sequence 2924 16 0.8 601 4 US-09-949-016-178846 Sequence 2924 16 0.8 601 4 US-09-949-016-178846 Sequence 2925 16 0.8 601 4 US-09-949-016-18852 Sequence 2926 16 0.8 601 4 US-09-949-016-18852 Sequence 2927 16 0.8 601 4 US-09-949-016-18852 Sequence 2928 16 0.8 601 4 US-09-949-016-18852 Sequence 2928 16 0.8 601 4 US-09-949-016-18852 Sequence 2928 16 0.8 601 4 US-09-949-016-18852 Sequence 2928 16 0.8 601 4 US-09-949-016-18852 Sequence 2929 16 0.8 601 4 US-09-949-016-18852 Sequence 2929 16 0.8 601 4 US-09-949-016-18852 Sequence 2929 17 0.8 601 4 US-09-949-016-18852 Sequence 2929 17 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-18852 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4 US-09-949-016-20550 Sequence 2929 18 0.8 601 4	904 16 0.8 601 4 US-09-949-016-164937 905 16 0.8 601 4 US-09-949-016-167373 906 16 0.8 601 4 US-09-949-016-177313 907 16 0.8 601 4 US-09-949-016-170138 908 16 0.8 601 4 US-09-949-016-170168 909 16 0.8 601 4 US-09-949-016-1720168 910 16 0.8 601 4 US-09-949-016-172823 911 16 0.8 601 4 US-09-949-016-172826 912 16 0.8 601 4 US-09-949-016-175651 913 16 0.8 601 4 US-09-949-016-175651 914 16 0.8 601 4 US-09-949-016-175621 915 16 0.8 601 4 US-09-949-016-175621 916 16 0.8 601 4 US-09-949-016-175631 917 16 0.8 601 4 US-09-949-016-175631 918 178 188 601 4 US-09-949-016-175631 919 19 19 19 19 19 19 19 19 19 19 19 19
917 16 0.0 601 4 US-09-99-016-177160 Sequence 17 9210 16 0.0 6011 4 US-09-99-016-177120 Sequence 77 9210 16 0.0 6011 4 US-09-99-016-177821 Sequence 77 9221 16 0.0 6011 4 US-09-99-016-178841 Sequence 77 9221 16 0.0 6011 4 US-09-99-016-178841 Sequence 77 9221 16 0.0 6011 4 US-09-99-016-178841 Sequence 77 9221 16 0.0 6011 4 US-09-99-016-178841 Sequence 77 9221 16 0.0 6011 4 US-09-99-016-188152 Sequence 77 9221 16	904 16 0.8 601 4 US-09-949-016-164937 Sequence 16493 905 16 0.8 601 4 US-09-949-016-167373 Sequence 16737 906 16 0.8 601 4 US-09-949-016-167373 Sequence 16737 907 16 0.8 601 4 US-09-949-016-170138 Sequence 17013 908 16 0.8 601 4 US-09-949-016-170138 Sequence 17013 909 16 0.8 601 4 US-09-949-016-172097 Sequence 17202 910 16 0.8 601 4 US-09-949-016-172623 Sequence 17286 911 16 0.8 601 4 US-09-949-016-173866 Sequence 17286 912 16 0.8 601 4 US-09-949-016-175565 Sequence 17555 913 16 0.8 601 4 US-09-949-016-176214 Sequence 17621 914 16 0.8 601 4 US-09-949-016-176214 Sequence 17621 915 16 0.8 601 4 US-09-949-016-176214 Sequence 17621 916 16 0.8 601 4 US-09-949-016-176214 Sequence 17621 917 176 0.8 601 4 US-09-949-016-176214 Sequence 17621

Sequence Sequence Sequence Sequence Sequence

```
RESULT 4
US-07-745-206A-14/c
                                                                                                                                                                                                                                                                                                                                                                                                           뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 1701
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-7008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: GATY BRETON et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PHEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR APPLICATION WHERER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 6886
US-09-489-039A-6886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
US-09-489-039A-7008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                         Sequence 14, Application US/07745206A Patent No. 5429921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7008, Application US/09489039A
Patent No. 6610836
GENERAL INFORMATION:
APPLICANT: GATY Breton et. al
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
PILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
PRIOR APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR PILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 7008
LENGTH: 1701
TWOPE: NUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                  APPLICANT: Feldman, Daniel
TITLE OF INVENTION: Human Calcium
TITLE OF INVENTION: Methods
CORRESPONDENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fitch, STREET; 135 S. Lace CITY: Chicago STATE: Illinois COUNTRY: U.S.A. ZIP: 60603
                                                                                                                                                                                  APPLICANT: Harpold, Michael APPLICANT: Ellis, Steven APPLICANT: Williams, Mark APPLICANT: McCue, Ann APPLICANT: Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                   1288 CTGTCCATCGGCAACCAGGT 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1288 CTGTCCATCGGCAACCAGGT 1307
                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                82 CTGTCCATCGGCAACCAGGT 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68 CTGTCCATCGGCAACCAGGT 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                 E: Fitch, Even,
135 S. LaSalle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.1%; Score 20; ilarity 100.0%; Pred. No. Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.1%; Score 20;
ilarity 100.0%; Pred. No.
Conservative 0; Mismatc
                                                                                     Tabin
                                                                                       Ŗ٦
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                   Flannery
                                                                                                                                                       Channel Compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1701;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 792;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
APPLICANT: Glordano, J.Y.
ITILE OF INVENTION. ESTS: and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTMARE: Patent.pm
SEQ ID NO 3396
LENGTH: 316

Sequence 3396, Applice Patent No. 6639063 GENERAL INFORMATION:

Application US/09621976

ALIGNMENTS

a

000

986 987 988 989 990 991 992 993

US-09-489-039A-7101
US-09-392-184-15
US-10-101-464A-854
US-09-328-352-1248
US-09-328-352-1248
US-09-328-352-1477
US-09-614-1248-1477
US-09-658-824-1477
US-09-658-824-1477
US-09-658-824-1477
US-09-658-824-1417
US-09-107-332A-1417
US-09-107-332A-1417
US-09-107-332A-1417
US-09-107-332A-1417
US-09-107-332A-1417
US-09-107-332A-1417
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5414
US-09-270-767-5614
US-09-448-1
US-08-609-4438-1
US-08-609-4438-1
US-08-569-063C-1

Sequence Sequence Sequence Sequence Sequence Sequence

3 7101, Ap
3 1248, App
1248, Ap
1477, Ap
1477, Ap
1477, Ap
1477, Ap
1477, Ap
1477, Ap
1477, Ap
1477, Ap
1417, App
1417, App
1417, App
182, App
182, App
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879, Ap
1879

Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

0 0 0 0 0

977 978 979 980 981 982 983

ი

```
RESULT 2

US-09-489-039A-6886

; Sequence 6886, Application US/09489039A

; Patent No. 6610836

; GENERAL INFORMATION:
                                                                         뭉
                                                                                        Ś
                                                                                                              В
                                                                                                                                  Ś
                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                       Matches
                                                                                                                                                                 ocal
                                                                                    203 CAACCTGGAAG
                                                                                                              157
                                                                                                                                                                Similarity
                                                                   CAACCTGGAAG
                                                                                                  ccachecadecadecerererereracedadracedadecerrererecedacerecresere 216
                                                                                                               CCACTCCAGGCAGCCCTCTCTCCTACCGAATACGAACGCTTCTTCGCACTGCTGACTC 202
                                                                                                                                                     Conservative
                                                                                                                                              3.7%; 5-
100.0%; Pr
                                                                    227
                                                                                      213
                                                                                                                                                 Score 71; DB; Pred. No. 6.4
                                                                                                                                                         DB 4; L
                                                                                                                                                 0,
                                                                                                                                                                 Length 316;
                                                                                                                                              Indels
                                                                                                                                            0;
                                                                                                                                            Gaps
```

-09-621-976-3396

ი

Or.

NAME/KEY: LOCATION:

TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:

LOCATION: 66.311
NAME/KEY: misc\_feature
LOCATION: 301
OTHER INFORMATION: n=a, g,

0

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-311-363-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-07-745-206A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1. Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 5150
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-372-7842
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 2470 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                         ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Re-lease #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/745,206

FILING DATE: 15-AUG-1991

ATTORNALY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION: NAME: Feder, Scott B
                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-51506
FELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                      STREET: 100.
OTTY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICANT: Brenner, Robert
TTLE OF INVENTION: Human Calcium Channel Compositions and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                ITLE OF INVENTION: Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
LOCATION:
                                                                                                                                         APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: unki
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 19910815
                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1856 AACAGGAAGAGCAAGAAGAG 1837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14, Application US/08311363
5. 5876958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                    California
                                                                                                                                                                                                                                                                                                                                                           1660 Union Street
                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McCue, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Harpold, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1..2469
                                                                                                                                                                                                                                                                                                                                                                            Brown, Martin, Haller & McClain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/07/745,206A
                                                                                                                                                          US/08/311,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 2470; 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-07-745-206A-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-311-363-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                         TELEPHONE: 312-372-7842
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 5467 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (619)238-0062
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Feder, Scott B
REFERENCE/DOCKET NUMBER: 51
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Feldman, TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: DNA (genomic)
                                                                                                                MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 199108 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 135 S.
CITY: Chicago
STATE: Illinoi
                                                                                                                                            STRANDEDNESS:
                                                                                                                                                          TYPE: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
TOPOLOGY: unl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                  COCATION:
                                                              OCATION:
                                                                                   IAME/KEY:
                                                                                                                                 COPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1856 AACAGGAAGAGCAAGAAGAG 1837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              60603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H: 2470 base pairs nucleic acid DEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/07745206A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           135 S. LaSalle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           McCue, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Williams, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Harpold, Michael
Ellis, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                 unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
.3392, 3396..3488, 3495..3539, 3543..3581, 3585
.3587, 3591.3626, 3630..3893, 3633..3737, 3744
..3746, 3750..4823, 4827..4841, 4845..5006, 5010
..5096, 5100..5306, 5310..5366, 5370..5465)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                join(144..3164,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1..2469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fitch, Even, Tabin & Flannery
                                                                                                                                                                                                                                                                                                                               19910815
                                                                                                                                                unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Calcium Channel Compositions and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Daniel
                                                                                                                                                                                                                                                                                                                                              US/07/745,206A
                                                                                                                                                                                                                12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20; ; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                3168..3245,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
21;
                                                                3249..3386,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2470
                                                                  3390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
```

Query Match

1.1%;

Score 20;

DB 1;

Length 5467;

Best Local Similarity

100.0%;

Pred. No. 20;

```
밁
                                                                                                                                 JS-08-311-363-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-311-363-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
                                                                                                                                                                                                                                                                                                             TELEPAX: (619)238-0999
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 5467 harr
                                                                  Matches
                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,206
FILING DATE: 15-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 63
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/311,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Brenner, Robert
IITLE OF INVENTION: Human Calcium Channel Compositions and
IITLE OF INVENTION: Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                               LOCATION:
LOCATION:
LOCATION:
                                                                                                                                                                                              NAME/KEY:
LOCATION:
LOCATION:
                                                                                                                                                                                                                                                                                     LENGTH: 5467 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: San Diego
STATE: California
                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                              701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMA
                                                                                 Similarity
AACAGGAAGAGCAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/08311363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                             Conservative 0;
                                                                                                                                                                                                                                                       unknown
E: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Williams, Mark
Feldman, Daniel
                                                                                                                                           .3392, 3396..3488, 3495..3539, 3543..3581, 3585
.3587, 3591..3626, 3630..3693, 3693..3737, 3744
..3746, 3750..4823, 4827..4881, 4845..5006, 5010
..5096, 5100..5306, 5310..5366, 5370..5465)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       McCue, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ellis, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Harpold, Michael
                                                                                                                                                                                                              join(144..3164, 3168..3245,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brown, Martin, Haller & McClain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/311,363
                                                                                                                                                                                                                                                                                                                                                                                                                            6362-51506
                                                                              Score 20; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                               Mismatches
                                                                                             DB 2;
                                                                                                                                                                                                            3249..3386,
                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                            Length 5467;
                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 indels
                                                                                                                                                                                                            3390
                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

RESULT 8

US-08-455-543A-8/c

Sequence 8

8, Application US/08455543A o. 5792846

GENERAL INFORMATION:

APPLICANT:

Harpold, Michael Ellis, Steven

APPLICANT:

RESULT 9

```
밁
                             Ş
                                                                                                                                 US-08-456-200B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-456-200B-11/c
                                                                Matches
                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1
Patent No.
                                                                                Best Local
                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: Bayer 8398.3-KGB TELECOMMUNICATION INFORMATION: TELEPHONE: (914) 332-1700
                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/094,712
FILING DATE: 19-JUL-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/
FILING DATE: 31-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: I
FILING DATE: 04-APR-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 26-MAR-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                TYPE: Nucleotide
                                                                                                                                                                                                                                                                                                                                                      NAME: Kurt G. Briscoe REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: NEC Powermate SX/20
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 19-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
887 AACAGGAAGAGCAAGAAGAG
                             701 AACAGGAAGAGCAAGAAGAG 720
                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tarrytown : New York RY: U.S.A.
                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10591-5144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1, Application US/08456200B
6229000
                                                                                                                                                                                                              6232 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: SPRUNG HORN KRAMER & WOODS 660 White Plains Road
                                                                                                                                                                                                                                                                                   (914) 332-1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unterbeck,
                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Franz, Jurgen; Weingartner, Bernhard;
Unterbeck, Axel; Rae, Peter
VENTION: TISSUE-SPECIFIC HUMAN NEURONAL
                                                                                                                                                                  Linear
                                                                                                                                                                                                                                                                                                                                                                                                       04-APR-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-MAY-1993
                                                                                                                                                                                Single
                                                             1.1%; Score 20;
100.0%; Pred. No.
tive 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THEIR USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CALCIUM CHANNEL SUB-TYPES AND
                                                                                                                                                                                                                                                                                                                                                                                                                     DE 41 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/064,778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07/858,278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/456,200B
868
                                                                Mismatches
                                                                              DB 3; Length 6232; 20;
                                                             Gaps
                                                              0
```

```
US-08-455-543A-8
Query Match 1.3
Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                                                                                                                               TELEFAX: (619)238-0062
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                             FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,543A
FILING DATE: May 31, 1995
                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 63
RELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION UNMBER: WO PCT/US89/01408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 07/868,354
FILING DATE: April 10, 1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                           PEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: April 4.
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                       OLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 04-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 100.
CTTY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/223
PTIING DATE: April 4, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                            LOCATION:
                                                                                                                                                                         LOCATION:
                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                 LOCATION:
                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                    nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                Seidman, Stephanie L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   California
                                                                                                                                                                                                                                                                                     7175 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                   (619)238-0062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                McCue, Ann
                                                                              3'UTR
6855..7175
                                                                                                                          5'UTR
1..143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ Version 1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                         144..6857
                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Brown, Martin, Haller & McClair
                                                                                                                                                                                                                                                                                                                                                       (619)238-0999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-APR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-AUG-1991
                                                                                                                                                                                                                       DNA (genomic)
                                                                                                                                                                                                                                                       double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  METHODS
1.1%; Score 20; DB 1; Length 7175; 100.0%; Pred. No. 20; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 07/176,899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US 07/603,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 07/482,384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 07/620,250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 07/745,206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08/223,305
                                                                                                                                                                                                                                                                                                                      8:
 ۰,
 Gaps
 0
```

```
닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                        US-08-193-078B-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-193-078B-8/c
Matches
             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence 8, Application US/08193078B Patent No. 5846757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 63
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 15-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Seldman, Stephanie L.
                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 10-APR-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWN, MARTIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Brenner, TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                               FEATURE
                                                                                                                          FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 0 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                            TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: SAN DIEGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                             LOCATION:
                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                      TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                       OCATION:
                                                                                                                                                                                                               COPOLOGY:
                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1999 AACAGGAAGAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1660 UNION STREET
                                                                                                                                                                                                                                                      7175 base pairs
                                                                                                                                                                                                                                                                                               619-238-0062
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brenner, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Williams, Mark
Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Harpold, Michael
Ellis, Steven
                                                                                                           5'UTR
1..143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        McCue, Ann
                                                                                                                                                                     Sas
                                                                   3'UTR
6855..7175
                                                                                                                                                      144..6857
                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                              619-238-0999
                                                                                                                                                                                              DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                          10-APR-1992
                                                                                                                                                                                                                           double
           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HUMAN CALCIUM CHANNEL COMPOSITIONS AND METHODS
              1.1%; Score 20; DB 2;
L00.0%; Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 07/868,354
                                                                                                                                                                                                                                                                                                                                                                                                               US 07/745,206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/193,078B
0;
                                                                                                                                                                                                                                                                                                                                        6362-53607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HALLER & McCLAIN
 Mismatches
                          Length 7175;
 Indels
0,
Gaps
0,
```

Ś

701 AACAGGAAGAGCAAGAAGAG 720

밁

1999 AACAGGAAGAGCAAGAAGAG 1980

```
RESULT 11
US-08-223-305C-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 8, Applic Patent No. 5851824
                                                                                                                                                                                    TELEFAX: (619) 238-0062
NFORMATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
FILING DATE: 20-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,250
APPLICATION NUMBER: 30-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                         PILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US89/01408
                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/603,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA: 07/868,354
APPLICATION NUMBER: 07/868,354
FILING DATE: Appil 10, 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/745,
ETITING DATE: 15 207/745,
                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                             REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 52
RELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
                                                                                           TOPOLOGY: li
                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRET: SAN F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ITLE OF INVENTION:
                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                               TORNEY/AGENT INFORMATION:
                 NAME/KEY:
                                                                                                                                                                                                                              relephone:
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/2
FILING DATE: April 4, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM COLOPERATING SYSTEM:
                                                                                                                                                                ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92101-2926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T: Brenner, Robert
INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS
INVENTION: METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08223305C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              California
                                                                                                                                                            7175 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
5'UTR
1..143
                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams, Mark
Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Harpold, Michael
                                              144..6857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          McCue, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diego
                                                                                                                                                                                                                               (619)238-0999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UMBER: US 07/745,206
15-AUG-1991
                                                                                             DNA (genomic)
                                                                                                                                                                                                                                                                                                                              04-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compatible
                                                                                                                                                                                                                                                                                            Stephanie L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Steven
                                                                                                                                                                                                                                                                                                                                            US 07/176,899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/223,305C
                                                                                                                                                                                                                                                                           33,779
                                                                                                                                                                                                                                                             52516 (P519739)
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY:
; LOCATION:
US-08-223-305C-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
US-08-149-097D-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No.
                                                                                                                                              PILING DATE: 30-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/482,384
                                                                                                                                                                                          PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/620,250
                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/914,231
FILING DATE: 13-UL-1992
                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US92/06903
FILING DATE: 14-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-D
SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                FILING DATE: 20-FEB-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1
FILING DATE: 11-AUG-1993
                                                               FILING DATE: 04-APR-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Brown, Martin, Haller & McClain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Brenner, Robert
TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
TITLE OF INVENTION: METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 05-NOV-
                                                                                                  APPLICATION NUMBER:
                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/745,206
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1999 AACAGGAAGAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92101-2926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08149097D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                McCue, Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Williams, Mark
Feldman, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Harpold, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3'UTR
6855..7175
                                                                                  04-APR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-NOV-1993
                                                                                                                                                                                                                                                                                     10-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1%; Score 20; DB
100.0%; Pred. No. 20
tive 0; Mismatches
                                                 WO PCT/US89/01408
                                                                                                                                                                                                                                                                                                      US 07/868,354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Release #1.0, Version #1.25
                                                                                                  US 07/603,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                      08/105,536
US 07/176,899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/149,097D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 7175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
```

ATTORNEY/AGENT INFORMATION:

FILING DATE:

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-949-386-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
JS-08-149-097D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8, Application US/08949386 Patent No. 6090623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/290,01
PILING DATE: 11-AUG-1994
APPLICATION NUMBER: 08/149,097
FILING DATE: 5-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 08/105,536
FILING DATE: 11-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (619) 238-0062
NFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/949,386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
TOLETT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (619) 238-0999
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                       CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-55038
                                                                                                                                      CLASSIFICATION:
                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KBY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999 AACAGGAAGAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                              92101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                    3: Brown, Martin, Haller & McClain
1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                            McCue, Ann
Gillespie, Alison
                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Harpold, Michael
Ellis, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Williams, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDS .
144..6857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6855..7175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1..143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; F1
                                                                                                                                                                                                                                                                                                                                                                                    38
                                                                                                    US/08/290,012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 7175;
20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
```

```
뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-450-562-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-949-386-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Appli
Patent No. 609651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserv
          APPLICATION NUMBER: 08/404,950 FILING DATE: 13-MAR-1995 APPLICATION NUMBER: 08/336,257 FILING DATE: 7-NOV-1994 PRIOR APPLICATION DATA: APPLICATION UNMBER: 08/314,083 FILING DATE: 28-SEPT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (619) 238-0062 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORM
                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/450,562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 7175 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 51,9808
TELECOMMUNICATION INFORMATION:
                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: HUMAN CALCIUM CHANNEL COMPOSITIONS AND TITLE OF INVENTION: METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: DNA (genomic)
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                               CITY: San Diego
                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999 AACAGGAAGAGCAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701 AACAGGAAGAGCAAGAAGAG 720
                                                                                                                                                                                                                                                                                                 92101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                              California
                                                                                                                                                                                                                                                                                                                                                               1660 Union Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           McCue, Ann
Gillespie, Alison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Harpold, Michael
Ellis, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Feldman, Daniel
Brenner, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Williams, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144..6857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ication US/08450562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6855..7175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5'UTR
                                                                                                                                                                                                                                                                                                                                                                             Brown, Martin, Haller & McClain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (619) 238-0999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robert
                                                                                                                                                                                                                                                                                                                                                                                                                 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 3;
20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 7175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
```

```
US-08-450-562-8
  Query Match
Best Local Similarity 100.0%; Pred. No. "atches 20; Conservative 0; Mismatch
                                                                          FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                        TELEFAX: (619) 238-006
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                              FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 07/46
FILING DATE: 02-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/1
                                                                                                                                                 EATURE:
                                                                                                                                                                                                                                                                                                                                 NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-519812
FELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 04-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING LALL.
PRIOR APPLICATION DATA:
PRIOR TOTAL NUMBER: 07/482,384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PILING DATA:
PRIOR APPLICATION DATA:
07/603,751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/74
FILING DATE: 15-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/11
FILING DATE: 11-AUG-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                        OLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 07-FEB-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/31
FILING DATE: 23-SEPT-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                          TTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                      LOCATION:
                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                      FOPOLOGY:
                                                                                                                                                                                                                                                              ENGTH:
                                                                                                                                                                                                                                                                                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/UFILING DATE: 14-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 5-NOV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 07/914,231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                               nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATION NUMBER:
                                                                                                                                                                                                                                                             7175 base pairs
                                                                                         3'UTR
                                                                                                                    5'UTR
1..143
                                                                            6855..7175
                                                                                                                                                                               SG
                                                                                                                                                                                                                       linear
                                                                                                                                                              144..6857
                                                                                                                                                                                                                                                                                                                        (619)
                                                                                                                                                                                                       DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                           04-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-JULY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4-APR-1994
                                                                                                                                                                                                                                   double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-AUG-1994
                                                                                                                                                                                                                                                                                                      238-0062
                                                                                                                                                                                                                                                                                                                       238-0999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07/745,206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07/868,354
                                                                                                                                                                                                                                                                                                                                                                                                                     07/176,899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT/US89/01408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCT/US92/06903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07/620,250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08/223,305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08/105,536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08/311,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08/193,078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08/149,097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08/290,012
     Mismatches
                 DB 3;
    0
                               Length 7175;
  Indels
  ç,
Gaps
```

0

Search completed: March Job time: 373 secs

8, 2005, 01:45:00

```
片
                           Ś
                                                                                                          US-08-984-709A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-984-709A-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
                                                      Matches
                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                            TELEFAX: (619) 587-53 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  general information:
                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Harpold, Michael M.
TITLE OF INVENTION: HUMAN CALC
TITLE OF INVENTION: METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Williams, Mark E.
                                                                                                                      NAME/KEY:
LOCATION:
                                                                                                                                                                         NAME/KEY:
                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Heller Ehrman White & McAuliffe STREET: 4250 Executive Square, Suite 700 CTIY: La Jolla
                                                                                                                                                                                                                                                      STRANDEDNESS: dou
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0
FILING DATE: 02-DEC-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 24735-9815 (formerly 6362-9815)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM:
                                                                                                                                                              OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                    ELEPHONE:
1999 AACAGGAAGAAGAAGAG 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1999 AACAGGAAGAAGAAGAG 1980
                 701 AACAGGAAGAAGAAGAAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                701 AACAGGAAGAAGAAGAG 720
                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω,
                                                                                                                                                                                                                                                                                    nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08984709A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     California
                                                                                                                                                                                                                                                                                              7175 base pairs
                                                1.1%; Score 20; ilarity 100.0%; Pred. No. Conservative 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stauderman,
                                                                                                                    3'UTR
6855..7175
                                                                                                                                                            5'UTR
1..143
                                                                                                                                                                                                    CDS
144..6857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                                                                                                      (619) 450-8400
19) 587-5360
                                                                                                                                                                                                                                            DNA (genomic)
                                                                                                                                                                                                                                                                       double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HUMAN CALCIUM CHANNEL COMPOSITIONS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/984,709A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kenneth A.
                                                                                                                                                                                                                                                                                                                            œ
                                                   Mismatches
                                                                 DB 3;
                                                   0
                                                                           Length 7175;
                                                   Indels
                                                 ٥,
                                                Gaps
                                                0
```